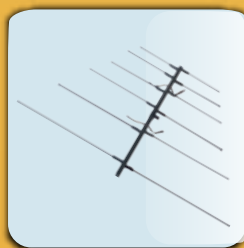




# PMR Professional Mobile Radio Antennas



TETRA

PMR

VHF

UHF

LTE

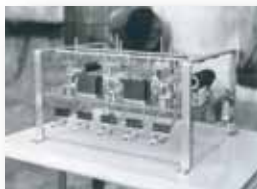
AIR TRAFFIC

RADIO BEACON

VEHICULAR

from the family experience

since  
**1969**



**1974**  
the First Genoa Boat Show



**1978** The new area of factory



**1980**

The new electronic department



**1985**  
The First Miami  
Boat Show

**2002** Installation at Pisa Airport



**2014** Banten today



- Siamo cresciuti insieme al mercato della nautica,

Che negli ultimi anni è cambiato e noi siamo rimasti giovani e flessibili alle esigenze di questo mercato, con l'obiettivo di mantenere serietà e responsabilità verso i nostri clienti e distributori.

- Abbiamo selezionato e riunito la nostra manodopera:

tutti estremamente competenti e specializzati: le nostre punte di diamante. Professionisti della progettazione e produzione che credono in ciò che fanno e fanno ciò in cui credono. Che mettono passione ed entusiasmo nel loro lavoro. Onesti, appassionati, impegnati.

- Scegliamo le migliori materie prime: siamo produttori.

Da quarant'anni la famiglia Ambrogi, titolare della società, conduce l'azienda: i numerosi anni di lavoro hanno consentito di accumulare esperienza, saper scegliere e saper lavorare le migliori materie prime con le più diverse metodologie produttive, purché siano serie, efficaci, accurate... le caratteristiche della produzione italiana.

Perché portino risultati e miglioramenti tangibili nel lavoro dei nostri installatori, e nella sicurezza dei loro clienti.

Possiamo così offrire un prodotto per ogni fascia di mercato:

- Barche di Prestigio,
- Professionale per le barche da lavoro
- Esigenze Creative
- Competitivo
- Economico

- Seguiamo il prodotto. Anche dopo la vendita.

Siamo a disposizione per offrire conoscenza ed esperienza: per ogni informazione necessaria alla scelta,

all'acquisto e all'installazione dell'antenna più giusta, cercando di interpretare le richieste dell'utilizzatore:

un'antenna sbagliata, un cavo o un connettore poco efficaci vanificherebbero tutto il lavoro.

- Grazie a questo,

Banten è una presenza speciale nel panorama italiano e mondiale della trasmissione e ricezione radio.

Una sorta di 'marchio doc': La nostra volontà è quella di essere i migliori nella produzione, per garantire migliori prodotti ed assicurando alti standard di servizio, professionalità.

Il nostro obiettivo è quello di assicurare competenza,

e, soprattutto, serietà.

...da oltre quarant'anni !



We grow up together nautical market, during these years it's changed and we are still young and flexible as required from this market. Our target is keeping trustworthiness and reliability for our customers and dealers.

We selected and assembled our job: everybody is extremely competent and specialized: they are our diamonds tips. Professional in design and in production: we believe in our work: impassioned, honest and engaged.

We choose the best raw materials, we are manufacturer company

From forty years Ambrogi's family, the company's owners, leads the business: several years of work allowed us to choose to work the best materials with various productive methodologies ... the Italian production peculiarity: to increase results in installer's work and for customer's safety.

We control the product also after the sale. We can offer you our knowhow: to choose and to install the correct model of antenna to satisfy your customers: a wrong antenna, cable or connector could compromise all work.

For these reasons Banten is a special brand in international radio antennas market. We want to improve the production quality to guarantee the best products with high standards. Our objective is to assure competence and, above all, reliability.



## LARGE BAND COAXIAL DIPOLE

code

11072

68 - 85 Mhz

11044

108 - 156 Mhz

11075

136 - 174 Mhz

11076

220 - 400 Mhz

- Large Band

- Waterproof construction

- Hard construction

### MODELS

| Code                 | 11072     | 11044       | 11075       | 11076       |
|----------------------|-----------|-------------|-------------|-------------|
| Frequency            | 68-85 Mhz | 108-144 Mhz | 136-174 Mhz | 220-400 Mhz |
| Length Size L        | 2,00 mt   | 1,30 mt     | 1,00 mt     | 0,6 mt      |
| Radom diameter       | 120 mm    |             |             |             |
| Weight               | 8 Kg      | 5 Kg        | 4,00 Kg     | 2,5 Kg      |
| Wind Load (160 Km/h) | 185 N     | 120 N       | 95 N        | 60 N        |

| MECHANICAL FEATURES          |                            | ELECTRICAL FEATURES    |                           |
|------------------------------|----------------------------|------------------------|---------------------------|
| Fitting                      | See the drawing            | Antenna                | Center fed coaxial dipole |
| Antenna structure            | Aluminium                  | SWR                    | <2,00                     |
| Radom tube                   | Epoxy fiberglass           | Gain                   | 0 db on 1/2 wave dipole   |
| Finishing                    | Polyurethane paint         | Max power              | 100 W at 50°C             |
| Colour                       | Grey RAL 7001              |                        | 200 W AT 35°C             |
| Irradiation element material | Aluminium                  | Polarization           | Vertical                  |
| Mounting                     | 4 bolts M 10 on dia 100    | Horizontal irradiation | 360°                      |
|                              | on standard flange dia 130 | Vertical irradiation   | 78°                       |
| Hardware                     | Stainless steel A2         | Connection             | N female base bottom exit |
| Working temperature          | -35°C +80°C                | Ground                 | Yes                       |
| Max wind resistance          | 350 Km/h                   | Lightning protection   | Yes Bolts                 |

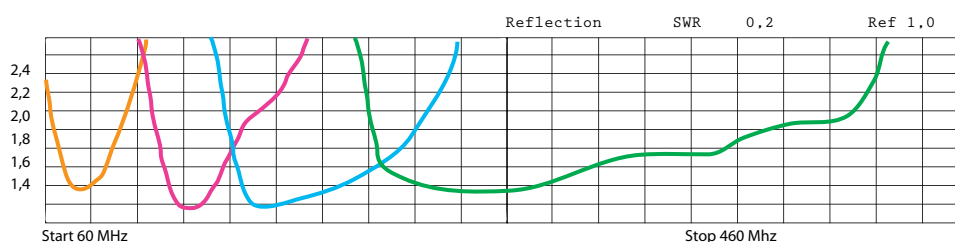
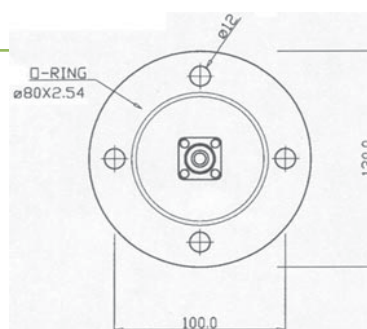
### ENVIRONMENTAL SPECIFICATION

Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K



## LARGE BAND COAXIAL DIPOLE

## code

- Large Band
- Waterproof construction
- Hard construction

|              |                      |                |
|--------------|----------------------|----------------|
| <b>11144</b> | <b>108 - 156 Mhz</b> | <b>5.5 dbi</b> |
| <b>11175</b> | <b>136 - 174 Mhz</b> | <b>5.5 dbi</b> |
| <b>11176</b> | <b>220 - 400 Mhz</b> | <b>5.5 dbi</b> |
| <b>11276</b> | <b>220 - 400 Mhz</b> | <b>8.5 dbi</b> |

## MODELS

| Code                 | 11144       | 11175       | 11176       | 11276       |
|----------------------|-------------|-------------|-------------|-------------|
| Frequency            | 108-136 Mhz | 136-174 Mhz | 220-400 Mhz | 220-400 Mhz |
| Gain                 | 5,5 db      | 5,5 dbi     | 5,5 dbi     | 8,5 dbi     |
| Vertical Irradiation | 38°         | 38°         | 38°         | 18°         |
| Length Size L        | 3,00 mt     | 2,40 mt     | 1,50 mt     | 3,00 mt     |
| Radom diameter       | 120 mm      |             |             |             |
| Weight               | 12,0 Kg     | 10,0 Kg     | 6,0 Kg      | 12,0 Kg     |
| Wind Load (160 Km/h) | 250 N       | 200 N       | 100 N       | 250 N       |

## MECHANICAL FEATURES

|                              |                                                       |
|------------------------------|-------------------------------------------------------|
| Fitting                      | See the drawing                                       |
| Antenna structure            | Aluminium                                             |
| Radom tube                   | Epoxy fiberglass                                      |
| Finishing                    | Polyurethane paint                                    |
| Colour                       | Grey RAL 7001                                         |
| Irradiation element material | Aluminium                                             |
| Mounting                     | 4 bolts M 10 on dia 100<br>on standard flange dia 130 |
| Hardware                     | Stainless steel A2                                    |
| Working temperature          | -35°C +80°C                                           |
| Max wind resistance          | 350 Km/h                                              |

## ELECTRICAL FEATURES

|                        |                                |
|------------------------|--------------------------------|
| Antenna                | Center fed coaxial dipole      |
| SWR                    | <2,00                          |
| Gain                   | see the table                  |
| Max power              | 100 W at 50°C<br>200 W AT 35°C |
| Polarization           | Vertical                       |
| Horizontal irradiation | 360°                           |
| Vertical irradiation   | see the table                  |
| Connection             | N female base bottom exit      |
| Ground                 | Yes                            |
| Lightning protection   | Yes Bolts                      |

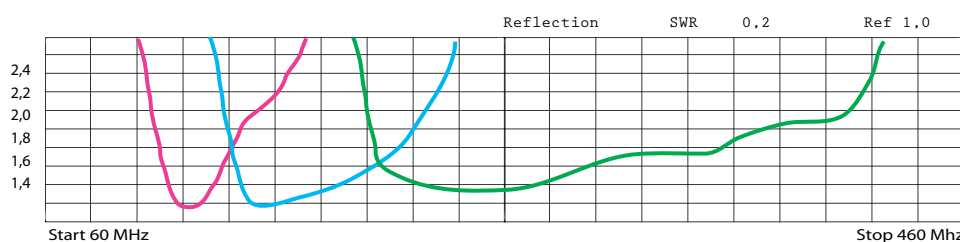
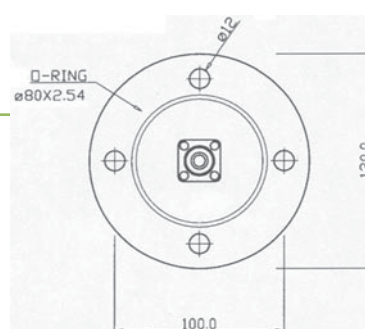
## ENVIRONMENTAL SPECIFICATION

Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K



## VHF CL RADOME ANTENNAS

- radome with high thickness epoxy resin
- conical whip to reduce the wind impact
- resistant to 1 inch ice
- stainless steel bracket
- TETRA Service Frequency

| Code    | Frequency     | gain  | V irradiation | Antenna type    | Max power | Lenght  | radom dia | Weight | Load wind 150 km/h |
|---------|---------------|-------|---------------|-----------------|-----------|---------|-----------|--------|--------------------|
| 10080   | 70-75 Mhz     | 2 dbi | 78°           | Dipole          | 100 W     | 2,80 mt | 28 mm     | 4,0 kg | 100 N              |
| 10081   | 75-80 Mhz     | 2 dbi | 78°           | Dipole          | 100 W     | 2,80 mt | 28 mm     | 4,0 Kg | 100 N              |
| 10098-1 | 118-136 Mhz   | 2 dbi | 78°           | Dipole          | 100 W     | 1,70 mt | 21 mm     | 3,5 Kg | 60 N               |
| 10082   | 136-145 Mhz   | 2 dbi | 78°           | Dipole          | 50 W      | 1,50 mt | 21 mm     | 3,0 Kg | 50 N               |
| 10099-1 | 144 - 162 Mhz | 2 dbi | 78°           | Dipole          | 50 W      | 1,30 mt | 21 mm     | 2,0 Kg | 43 N               |
| 10083   | 155-175 Mhz   | 2 dbi | 78°           | Dipole          | 50 W      | 1,30 mt | 21 mm     | 2,0 kg | 43 N               |
| 10084   | 136-150 Mhz   | 5 dbi | 30°           | 2 el. Collinear | 200 W     | 2,70 mt | 28 mm     | 5,5 Kg | 120 N              |
| 10097-1 | 147-162 Mhz   | 5 dbi | 30°           | 2 el. Collinear | 200 W     | 2,50 mt | 28 mm     | 5,0 Kg | 120 N              |
| 10085   | 160-175 Mhz   | 5 dbi | 30°           | 2 el. Collinear | 200 W     | 2,50 mt | 28 mm     | 5,0 Kg | 120 N              |

### MECHANICAL FEATURES

|                              |                                 |
|------------------------------|---------------------------------|
| Length                       | see the table                   |
| Weight                       | see the table                   |
| Sections                     | 1                               |
| Radome                       | epoxy fiberglass                |
| Fitting                      | See the drawing                 |
| Brackets material            | Aisi 316 stainless Steel        |
| Structure                    | Epoxy fiberglass                |
| Finishing                    | Polyurethane paint              |
| Colour                       | White RAL 9000<br>Grey RAL 7001 |
| Irradiation element material | Brass                           |
| Working temperature          | -35°C +80°C                     |
| Max wind resistance          | 150 Km/h                        |
| Base torsion force           | see the table                   |

### ELECTRICAL FEATURES

|                        |                                 |
|------------------------|---------------------------------|
| Frequency              | see the table                   |
| Antenna                | see the table                   |
| S.W.R.                 | < 1,5                           |
| Impedance              | 50 Ohm                          |
| Gain                   | see the table                   |
| Power                  | See the table                   |
| Polarization           | Vertical                        |
| Horizontal irradiation | 360°                            |
| Vertical irradiation   | see the table                   |
| Connector              | N female<br>PL female (page 34) |
| Lightning protection   | Yes                             |
| DC closed              | Yes                             |

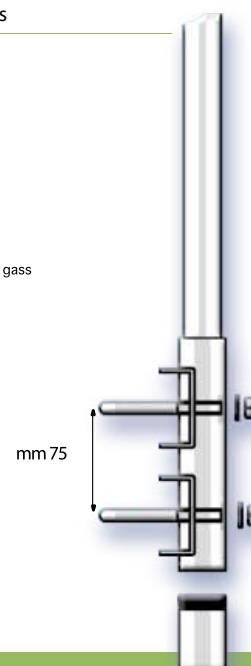
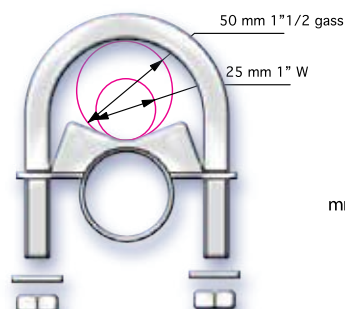
### ENVIRONMENTAL SPECIFICATION

Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K



## UHF CL RADOME ANTENNAS TETRA - PMR - LTE

- radome with high thickness epoxy resin
- conical whip to reduce the wind impact
- resistant to 1 inch ice
- stainless steel bracket

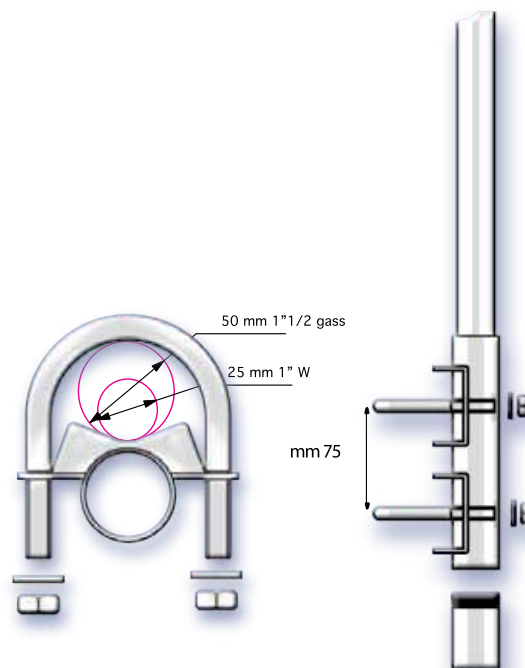
| Code  | Frequency   | gain  | V irradiation | Antenna type    | Max power | Lenght  | radom dia | Weight | Load wind 150 km/h |       |
|-------|-------------|-------|---------------|-----------------|-----------|---------|-----------|--------|--------------------|-------|
| 14090 | 380-435 Mhz | 2 dbi | 78°           | dipole          | 50W       | 0,60 mt | 21 mm     | 2,5 Kg | 35 N               | TETRA |
| 14091 | 380-435 Mhz | 5 dbi | 30°           | 2 el Collinear  | 100 W     | 1,50 mt | 21 mm     | 4,5 kg | 65 N               | TETRA |
| 14092 | 380-435 Mhz | 7 dbi | 18°           | 2 el collinear  | 150 W     | 2,20 mt | 28 mm     | 6,5 kg | 200 N              | TETRA |
| 14080 | 400-470 Mhz | 2 dbi | 78°           | Dipole          | 100 W     | 0,60 mt | 21 mm     | 2,5 Kg | 35 N               | PMR   |
| 14081 | 400-470 Mhz | 5 dbi | 30°           | 2 el. Collinear | 100 W     | 1,20 mt | 21 mm     | 4,5 kg | 65 N               | PMR   |
| 14083 | 400-435 Mhz | 7 dbi | 18°           | 4 el. Collinear | 150 W     | 2,20 mt | 28 mm     | 6,5 kg | 200 N              | PMR   |
| 14084 | 430-470 Mhz | 7 dbi | 18°           | 4 el. Collinear | 150 W     | 2,20 mt | 28 mm     | 6,5 kg | 200 N              | PMR   |
| 14320 | 746-869 Mhz | 8 dbi | 15°           | 8 el collinear  | 250 W     | 1,80 mt | 40 mm     | 6,5 Kg | 200 N              | LTE   |

### MECHANICAL FEATURES

|                              |                                                           |
|------------------------------|-----------------------------------------------------------|
| Length                       | see the table                                             |
| Weight                       | see the table                                             |
| Sections                     | 1                                                         |
| Radome                       | epoxy fiberglass                                          |
| Fitting                      | See the drawing                                           |
| Brackets material            | Aisi 316 stainless Steel                                  |
| Structure                    | Epoxy fiberglass                                          |
| Finishing                    | Polyurethane paint                                        |
| Colour                       | White RAL 9000<br>Grey RAL 7001<br>horizont blue RAL 5024 |
| Irradiation element material | Brass                                                     |
| Working temperature          | -35°C +80°C                                               |
| Max wind resistance          | 150 Km/h                                                  |
| Base torsion force           | see the table                                             |

### ELECTRICAL FEATURES

|                        |               |
|------------------------|---------------|
| Frequency              | see the table |
| Antenna                | see the table |
| S.W.R.                 | < 1,5         |
| Impedance              | 50 Ohm        |
| Gain                   | see the table |
| Power                  | see the table |
| Polarization           | Vertical      |
| Horizontal irradiation | 360°          |
| Vertical irradiation   | see the table |
| Connector              | N female      |
| Lightning protection   | Yes           |
| DC closed              | Yes           |



### ENVIRONMENTAL SPECIFICATION

Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K

## VHF MAST RADOME ANTENNAS

- radome with high thickness epoxy resin
- conical whip to reduce the wind impact
- resistant to 1 inch ice
- stainless steel bracket
- TETRA Service Frequency

| Code  | Frequency     | gain  | V irradiation | Antenna type    | Max power | Lenght  | Mount* | radom dia | Weight | Load wind 150 km/h |
|-------|---------------|-------|---------------|-----------------|-----------|---------|--------|-----------|--------|--------------------|
| 14180 | 70-75 Mhz     | 2 dbi | 78°           | Dipole          | 100 W     | 2,80 mt | 2      | 28 mm     | 4,0 kg | 100 N              |
| 14181 | 75-80 Mhz     | 2 dbi | 78°           | Dipole          | 100 W     | 2,80 mt | 2      | 28 mm     | 4,0 Kg | 100 N              |
| 14182 | 118-136 Mhz   | 2 dbi | 78°           | Dipole          | 50 W      | 1,70 mt | 1      | 21 mm     | 3,5 Kg | 60 N               |
| 14183 | 136-145 Mhz   | 2 dbi | 78°           | Dipole          | 50 W      | 1,50 mt | 1      | 21 mm     | 3,0 Kg | 50 N               |
| 14184 | 144 - 162 Mhz | 2 dbi | 78°           | Dipole          | 50 W      | 1,30 mt | 1      | 21 mm     | 2,0 Kg | 43 N               |
| 14185 | 155-175 Mhz   | 2 dbi | 78°           | Dipole          | 50 W      | 1,30 mt | 1      | 21 mm     | 2,0 kg | 43 N               |
| 14197 | 136-150 Mhz   | 5 dbi | 30°           | 2 el. Collinear | 200 W     | 2,70 mt | 2      | 28 mm     | 5,5 Kg | 120 N              |
| 14198 | 147-162 Mhz   | 5 dbi | 30°           | 2 el. Collinear | 200 W     | 2,50 mt | 2      | 28 mm     | 5,0 Kg | 120 N              |
| 14199 | 160-175 Mhz   | 5 dbi | 30°           | 2 el. Collinear | 200 W     | 2,50 mt | 2      | 28 mm     | 5,0 Kg | 120 N              |

### MECHANICAL FEATURES

|                              |                                 |
|------------------------------|---------------------------------|
| Length                       | see the table                   |
| Weight                       | see the table                   |
| Sections                     | 1                               |
| Radome                       | epoxy fiberglass                |
| Fitting                      | See the drawing                 |
| Brackets material            | Aisi 316 stainless Steel        |
| Structure                    | Epoxy fiberglass                |
| Finishing                    | Polyurethane paint              |
| Colour                       | White RAL 9000<br>Grey RAL 7001 |
| Irradiation element material | Brass                           |
| Working temperature          | -35°C +80°C                     |
| Max wind resistance          | 150 Km/h                        |
| Base torsion force           | see the table                   |

### ELECTRICAL FEATURES

|                        |                                  |
|------------------------|----------------------------------|
| Frequency              | see the table                    |
| Antenna                | see the table                    |
| S.W.R.                 | < 1,5                            |
| Impedance              | 50 Ohm                           |
| Gain                   | see the table                    |
| Power                  | see the table                    |
| Polarization           | Vertical                         |
| Horizontal irradiation | 360°                             |
| Vertical irradiation   | see the table                    |
| Connector              | N female<br>option VHF PL female |
| Lightning protection   | Yes                              |
| DC closed              | Yes                              |

\*1

\*2

### ENVIRONMENTAL SPECIFICATION

Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K



- radome with high thickness epoxy resin
- conical whip to reduce the wind impact
- resistant to 1 inch ice
- stainless steel bracket

| Code  | Frequency   | gain  | V irradiation | Antenna type    | Max power | Lenght  | Base* | radome dia | Weight | Load wind 150 km/h |       |
|-------|-------------|-------|---------------|-----------------|-----------|---------|-------|------------|--------|--------------------|-------|
| 14190 | 380-435 Mhz | 2 dbi | 78°           | Dipole          | 50W       | 0,60 mt | 1     | 21 mm      | 2,5 Kg | 35 N               | TETRA |
| 14191 | 380-435 Mhz | 5 dbi | 30°           | 2 el Collinear  | 100 W     | 1,50 mt | 1     | 21 mm      | 4,5 kg | 65 N               | TETRA |
| 14192 | 380-435 Mhz | 7 dbi | 18°           | 4 el collinear  | 150 W     | 2,20 mt | 2     | 28 mm      | 6,5 kg | 200 N              | TETRA |
| 14280 | 400-470 Mhz | 2 dbi | 78°           | Dipole          | 100 W     | 0,60 mt | 1     | 28 mm      | 2,5 Kg | 35 N               | PMR   |
| 14281 | 400-470 Mhz | 5 dbi | 30°           | 2 el. Collinear | 100 W     | 1,20 mt | 1     | 21 mm      | 4,5 kg | 65 N               | PMR   |
| 14283 | 400-435 Mhz | 7 dbi | 18°           | 4 el. Collinear | 150 W     | 2,20 mt | 2     | 28 mm      | 6,5 kg | 200 N              | PMR   |
| 14284 | 430-470 Mhz | 7 db  | 18°           | 4 el. Collinear | 150 W     | 2,20 mt | 2     | 28 mm      | 6,5 kg | 200 N              | PMR   |
| 14317 | 746-869 Mhz | 5 dbi | 30°           | 2 el collinear  | 100 W     | 0,80 mt | 1     | 30 mm      | 2,5 kg | 35 N               | LTE   |

## MECHANICAL FEATURES

|                              |                                                          |
|------------------------------|----------------------------------------------------------|
| Length                       | see the table                                            |
| Weight                       | see the table                                            |
| Sections                     | 1                                                        |
| Radome                       | epoxy fiberglass                                         |
| Fitting                      | See the drawing                                          |
| Brackets material            | Aisi 316 stainless Steel                                 |
| Structure                    | Epoxy fiberglass                                         |
| Finishing                    | Polyurethane paint                                       |
| Colour                       | White RAL 9000<br>Grey RAL 7001<br>Horizon Blue RAL 5023 |
| Irradiation element material | Brass                                                    |
| Working temperature          | -35°C +80°C                                              |
| Max wind resistance          | 150 Km/h                                                 |
| Base torsion force           | see the table                                            |

## ELECTRICAL FEATURES

|                        |               |
|------------------------|---------------|
| Frequency              | see the table |
| Antenna                | see the table |
| S.W.R.                 | < 1,5         |
| Impedance              | 50 Ohm        |
| Gain                   | see the table |
| Power                  | see the table |
| Polarization           | Vertical      |
| Horizontal irradiation | 360°          |
| Vertical irradiation   | see the table |
| Connector              | N female      |
| Lightning protection   | Yes           |
| DC closed              | Yes           |

## ENVIRONMENTAL SPECIFICATION

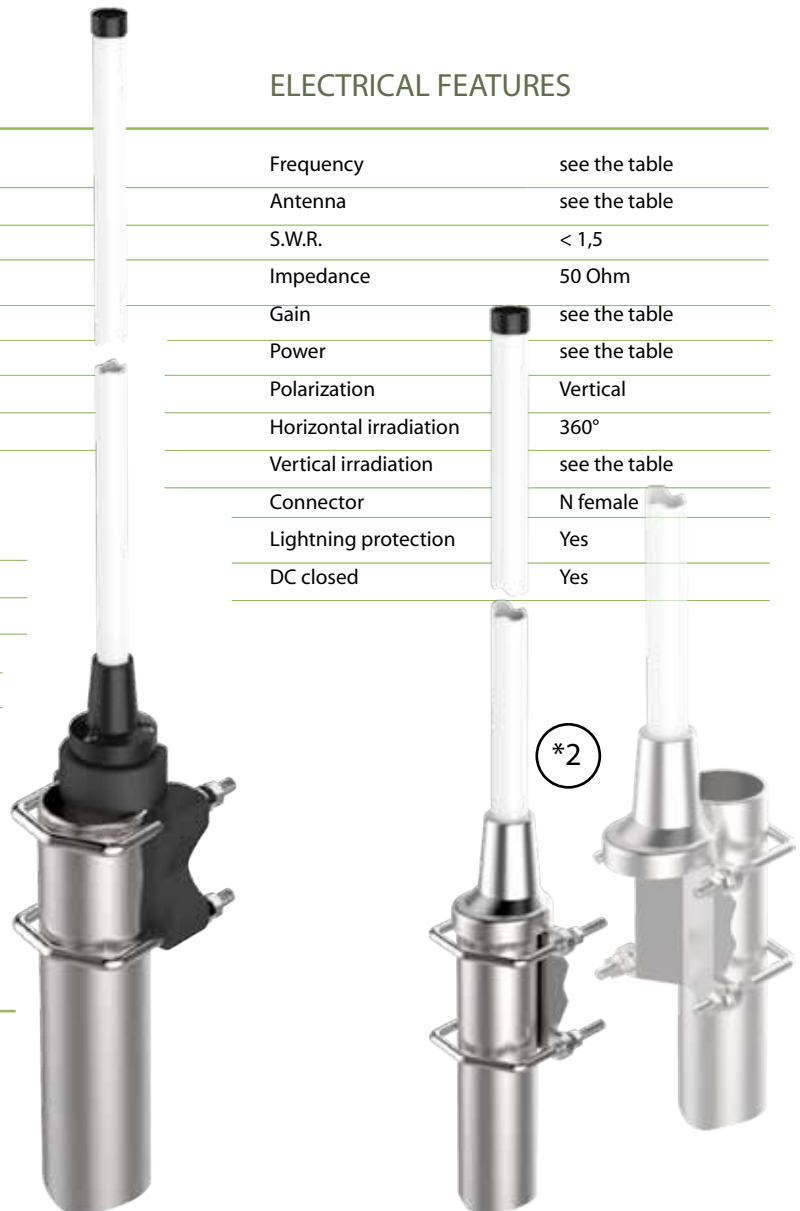
Temperature, salt, ice, sun irradiation

resistance in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K



## VHF TU RADOME ANTENNAS

- radome with high thickness epoxy resin
- conical whip to reduce the wind impact
- resistant to 1 inch ice
- stainless steel bracket

suggestion of mounting:

| Code  | Frequency   | Lenght  | radom dia | Weight | Load wind 150 km/h |            |
|-------|-------------|---------|-----------|--------|--------------------|------------|
| 15118 | 118-136 Mhz | 1,50 mt | 17 mm     | 1,0 kg | 26 N               | AIR BAND   |
| 15135 | 136-150 Mhz | 1,50 mt | 17 mm     | 1,0 kg | 26 N               | PMR        |
| 15210 | 144-162 Mhz | 1,30 mt | 17 mm     | 1,0 kg | 26 N               | MARINE     |
| 15150 | 160-175 Mhz | 1,30 mt | 17 mm     | 1,0 kg | 26 N               | PMR        |
| 15300 | 300-340 Mhz | 0,80 mt | 17 mm     | 0,8 kg | 15 N               | RIVER COMM |
| 15138 | 385-435 Mhz | 0,80 mt | 17 mm     | 0,8 kg | 15 N               | TETRA      |
| 15139 | 400-435 Mhz | 0,60 mt | 17 mm     | 0,7 Kg | 15 N               | PMR        |
| 15339 | 435-470 Mhz | 0,60 mt | 17 mm     | 0,7 Kg | 15 N               | PMR        |

### MECHANICAL FEATURES

|                              |                                 |
|------------------------------|---------------------------------|
| Length                       | see the table                   |
| Weight                       | see the table                   |
| Sections                     | 1                               |
| Radome                       | epoxy fiberglass                |
| Fitting                      | See the drawing                 |
| Brackets material            | Aisi 316 stainless Steel        |
| Structure                    | Epoxy fiberglass                |
| Finishing                    | Polyurethane paint              |
| Colour                       | White RAL 9000<br>Grey RAL 7001 |
| Irradiation element material | Brass                           |
| Working temperature          | -35°C +80°C                     |
| Max wind resistance          | 150 Km/h                        |
| Base torsion force           | see the table                   |

### ELECTRICAL FEATURES

|                        |                                  |
|------------------------|----------------------------------|
| Frequency              | see the table                    |
| Antenna                | end feed dipole                  |
| S.W.R.                 | < 1,5                            |
| Impedance              | 50 Ohm                           |
| Gain                   | 2 dbi                            |
| Power                  | 100 W                            |
| Polarization           | Vertical                         |
| Horizontal irradiation | 360°                             |
| Vertical irradiation   | 78°                              |
| Connector              | N female<br>option VHF PL female |
| Lightning protection   | Yes                              |
| DC closed              | Yes                              |

N female connector

1204 - connector cover cap  
supplied with all antennas

more type of mounting  
at page 39

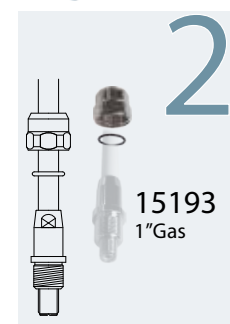
### ENVIRONMENTAL SPECIFICATION

Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K



## VHF/UHF large band dipole

code 14050

code 14051

code 14052

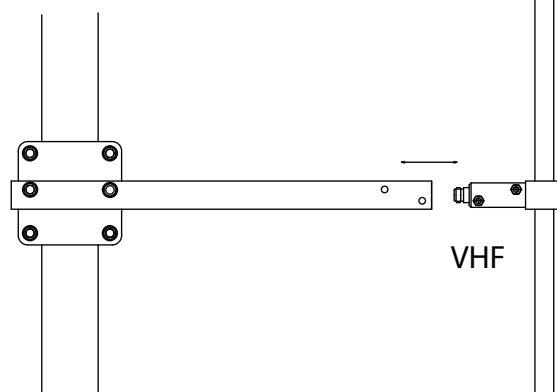
136-146 Mhz

145-175 Mhz

385-470 Mhz

### MODELS

| Code                 | 14050       | 14051       | 14052                                         |
|----------------------|-------------|-------------|-----------------------------------------------|
| Frequency            | 136-146 Mhz | 146-174 Mhz | 385-470 Mhz                                   |
| Dipole Length        | 1,00 mt     | 0,90 mt     | 0,375 mt                                      |
| Distance from mast   | 0,535 mt    | 0,500 mt    | 0,2 mt (385-400 MHz)<br>0,18 mt (400-470 MHz) |
| Weight               | 4 Kg        | 4 Kg        | 1,20 Kg                                       |
| Wind Load (160 Km/h) | 185 N       | 120 N       |                                               |

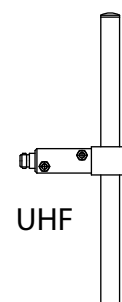


### MECHANICAL FEATURES

|                     |                                                         |
|---------------------|---------------------------------------------------------|
| Antenna structure   | Stainless Steel 304                                     |
| Plstic component    | Lexan                                                   |
| Dimension           | see the table                                           |
| Mast Support        | standard 1/4 Lanbda<br>dufferent length support aveable |
| Hardware            | Stainless steel A4                                      |
| Working temperature | -35°C +80°C                                             |
| Max wind resistance | 200 Km/h                                                |

### ELECTRICAL FEATURES

|                        |                              |
|------------------------|------------------------------|
| Frequency              | see the table                |
| Antenna                | Center fed coaxial dipole    |
| SWR                    | <1,5                         |
| Gain                   | 4 dbi                        |
| Max power              | 200 W                        |
| Polarization           | Vertical ad horizontal       |
| Horizontal irradiation | 210°                         |
| Vertical irradiation   | 78°                          |
| Connection             | N connector exit in the base |
| Ground                 | Yes                          |
| Lightning protection   | Yes                          |



### ENVIRONMENTAL SPECIFICATION

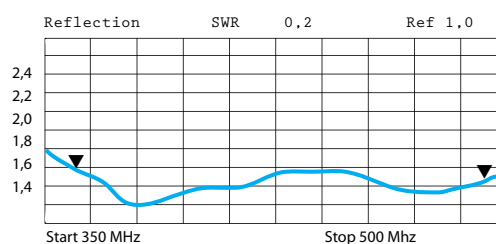
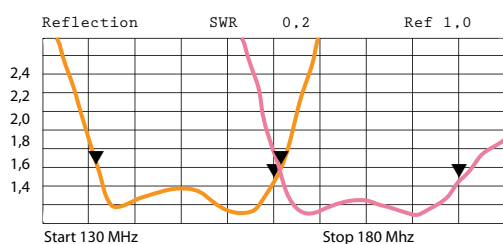
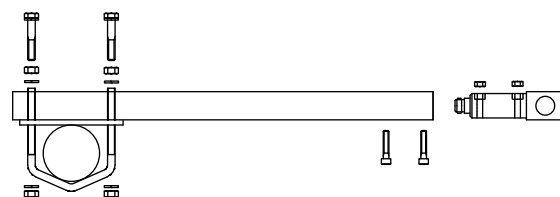
Temperature, salt, ice, sun irradiation resistance

in accordance with MIL-STD 810E

Vibration resistance in accordance with MIL-STD 167-1

Shock resistance in accordance with MIL-STD 810E

Treatments and paintings in accordance with MIL-T-704K



| Code                 | 14054       | 14055       |
|----------------------|-------------|-------------|
| Frequency            | 136-146 Mhz | 146-174 Mhz |
| Length               | 1,00 mt     | 0,90 mt     |
| Hight                | 1,00 mt     | 0,90 mt     |
| Gain                 | 7 dbi       | 7 dbi       |
| Irradiation lobe H   | 110°        | 110°        |
| Irradiation lobe V   | 65°         | 65°         |
| Weight               | 4 Kg        | 4 Kg        |
| Wind Load (160 Km/h) | 185 N       | 120 N       |

### MECHANICAL FEATURES

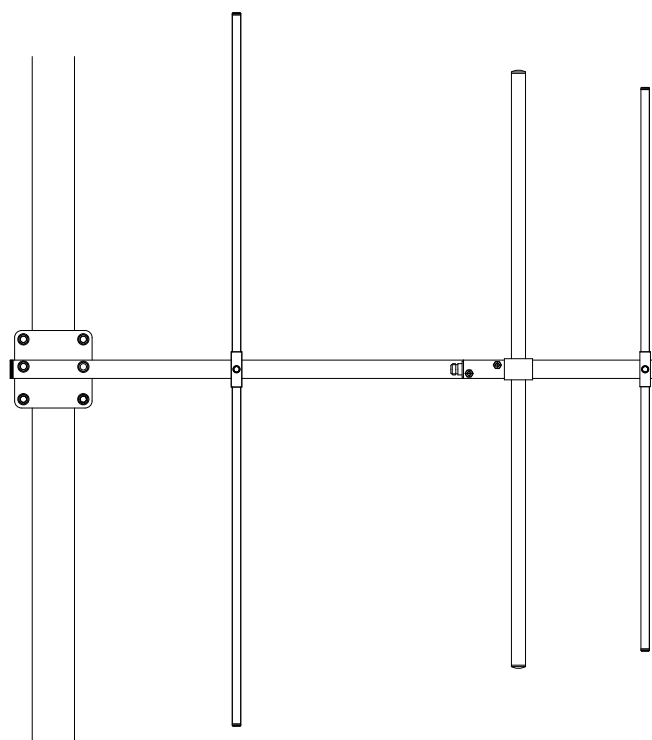
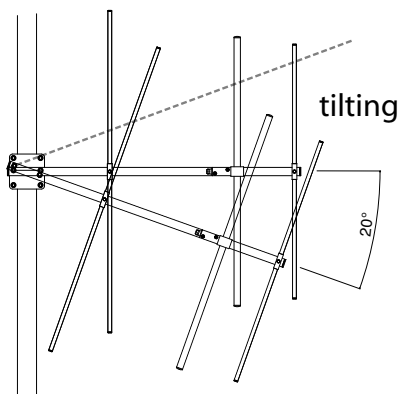
|                     |                                                         |
|---------------------|---------------------------------------------------------|
| Antenna structure   | Stainless Steel 304                                     |
| Plstic component    | Lexan                                                   |
| Dimension           | see the table                                           |
| Mast Support        | standard 1/4 Lanbda<br>dufferent length support aveable |
| Hardware            | Stainless steel A4                                      |
| Working temperature | -35°C +80°C                                             |
| Max wind resistance | 200 Km/h                                                |

### ELECTRICAL FEATURES

|                        |                              |
|------------------------|------------------------------|
| Frequency              | see the table                |
| Antenna                | Center fed coaxial dipole    |
| SWR                    | <1,5                         |
| Gain                   | see the table                |
| Max power              | 200 W                        |
| Polarization           | Vertical ad horizontal       |
| Horizontal irradiation | see the table                |
| Vertical irradiation   | see the table                |
| Connection             | N connector exit in the base |
| Lightning protection   | DC close                     |

### ENVIRONMENTAL SPECIFICATION

Temperature, salt, ice, sun irradiation resistance  
in accordance with MIL-STD 810E  
Vibration resistance in accordance with MIL-STD 167-1  
Shock resistance in accordance with MIL-STD 810E  
Treatments and paintings in accordance with MIL-T-704K





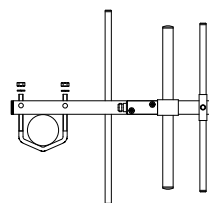
**code 14056**  
**code 14057**

**385-470 Mhz YAGI 3 elements**  
**385-470 Mhz YAGI 6 elements**

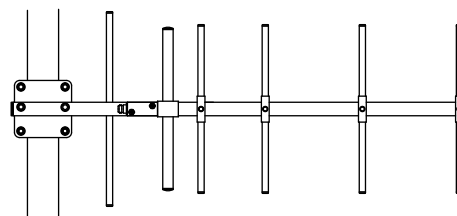
## UHF Directive

### MODELS

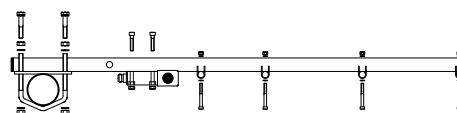
| Code                 | 14056       | 14057       |
|----------------------|-------------|-------------|
| Frequency            | 385-470 Mhz | 385-470 Mhz |
| Length               | 0,375 mt    | 0,980 mt    |
| Hight                | 0,340 mt    | 0,340 mt    |
| Gain                 | 7 dbi       | 10 dbi      |
| Irradiation lobe H   | 110°        | 75°         |
| Irradiation lobe V   | 65°         | 55°         |
| Weight               | 1,20 Kg     | 4 Kg        |
| Wind Load (160 Km/h) | 40 N        | 120 N       |



14056



14057



### MECHANICAL FEATURES

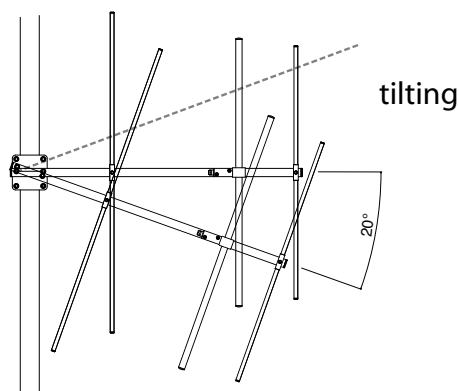
|                     |                                                         |
|---------------------|---------------------------------------------------------|
| Antenna structure   | Stainless Steel 304                                     |
| Plstic component    | Lexan                                                   |
| Dimension           | see the table                                           |
| Mast Support        | standard 1/4 Lanbda<br>dufferent length support aveable |
| Hardware            | Stainless steel A4                                      |
| Working temperature | -35°C +80°C                                             |
| Max wind resistance | 200 Km/h                                                |

### ELECTRICAL FEATURES

|                        |                              |
|------------------------|------------------------------|
| Frequency              | see the table                |
| Antenna                | Center fed coaxial dipole    |
| SWR                    | <1,5                         |
| Gain                   | see the table                |
| Max power              | 200 W                        |
| Polarization           | Vertical ad horizontal       |
| Horizontal irradiation | see the table                |
| Vertical irradiation   | see the table                |
| Connection             | N connector exit in the base |
| Lightning protection   | DC close                     |

### ENVIRONMENTAL SPECIFICATION

|                                                                                       |
|---------------------------------------------------------------------------------------|
| Temperature, salt, ice, sun irradiation resistance<br>in accordance with MIL-STD 810E |
| Vibration resistance in accordance with MIL-STD 167-1                                 |
| Shock resistance in accordance with MIL-STD 810E                                      |
| Treatments and paintings in accordance with MIL-T-704K                                |



## MECHANICAL FEATURES

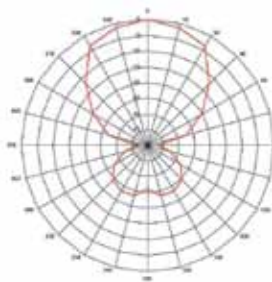
|                     |                         |
|---------------------|-------------------------|
| Length              | 3,00 mt                 |
| Width               | 3,40 mt                 |
| Weight              | 12 kg                   |
| Bottom diameter     | 60 mm                   |
| Element diameter    | 30 mm                   |
| Structure           | Aluminium               |
| Finishing           | Polyurethane paint      |
| Colour              | Grey RAL 7001           |
| Working temperature | -35C +80C               |
| Wind resistance     | 150 Km/h                |
| Base torsion force  | 360 N at wind max speed |
| Fittings            | Vertical or Horizontal  |

## ELECTRICAL FEATURES

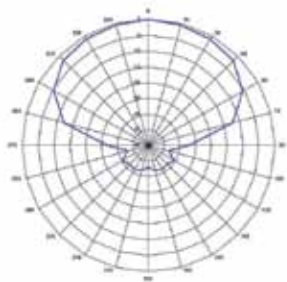
|                        |                  |
|------------------------|------------------|
| Frequency              | 40 - 42 Mhz      |
| Antenna                | Yagi 3 Elements  |
| S.W.R.                 | <2,00 Band       |
|                        | <1,5 Center Band |
| Impedance              | 50 Ohm           |
| Gain                   | 6 db             |
| Power                  | 500 W            |
| Horizontal Irradiation | 104°             |
| Vertical Irradiation   | 66°              |
| Connector              | N Female         |
| Lighting protection    | Yes              |
| DC closed              | Yes              |

## MOUNTING FEATURES

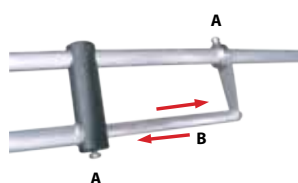
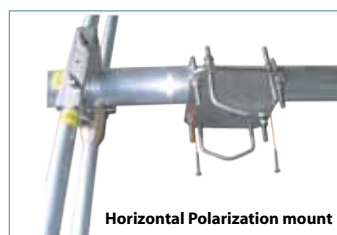
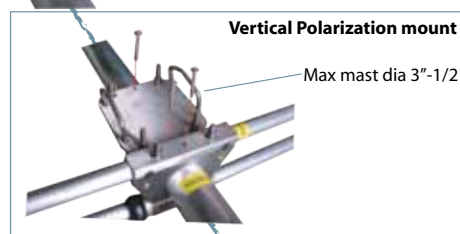
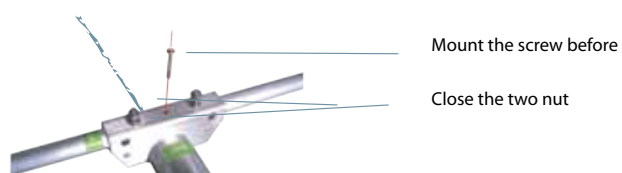
Tube from dia 2" min to dia Max 3"1/2



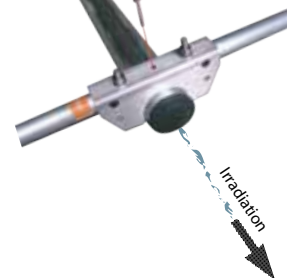
V - PLANE



H - PLANE



Open the bolt M13 (A)  
Move the part B to tune the antenna  
Screw the bolt (A)



**LTE 746 - 869 Mhz**  
**OMNIDIRECTIONAL 12 dbi Gain**

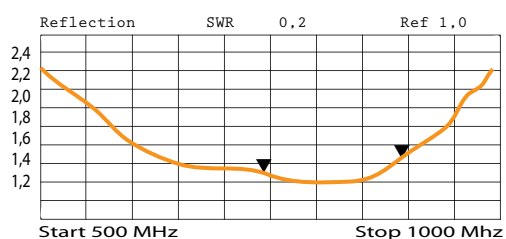
**code 13319**

**MECHANICAL FEATURES**

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| Sections            | 1                                                        |
| Fiberglass diameter | 52 mm                                                    |
| Lenght              | 4,50 mt                                                  |
| Fittings            | Stainless steel ferrule dia 60mm                         |
| Fixing              | U bracket on pipe 1"1/2 up to 2"1/2                      |
| Radome tube         | Epoxy Fiberglass                                         |
| Finishing           | Poliurethane paint                                       |
| Colour              | White RAL 9000<br>Grey RAL 7001<br>Horizon Blue RAL 5023 |
| Elements material   | Silver plated brass                                      |
| Wind max            | 250 Km /h                                                |
| Weight              | 16 Kg                                                    |
| Working temperature | -35 +70 C°                                               |

**ELECTRICAL FEATURES**

|                        |                           |
|------------------------|---------------------------|
| Frequency              | 746 - 869 Mhz             |
| Gain                   | 12 dbi                    |
| Bandwith at SWR <2,0   | 125 Mhz                   |
| SWR / Return Ross      | 1,5:1/14 db               |
| Impedance              | 50 Ohm                    |
| Max Power              | 500 W                     |
| Polarization           | Vertical                  |
| Horizontal irradiation | 360 °                     |
| Vertical irradiation   | 5 °                       |
| Lightning protection   | DC Ground                 |
| Connection             | 7/16                      |
| Connection position    | Bottom Inside the support |



# MULTIPLE DIPOLE INDIPENDENTLY FED 385-470 Mhz TETRA

**code 11314 (2 dipoles)**

**code 11311 (3 dipoles)**

**code 11312 (4 dipoles)**

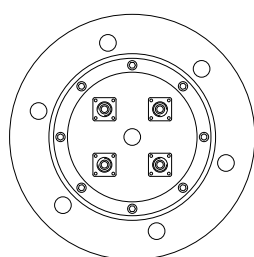
## MECHANICAL FEATURES

|                             |                              |
|-----------------------------|------------------------------|
| Sections                    | 1                            |
| Mast diameter               | 180 mm                       |
| Fitting                     | Peralluman dia 265 Flange    |
| Antenna structure           | Aluminium                    |
| Radom tube                  | Epoxy fiberglass             |
| Finishing                   | Polihurethane paint          |
| Colour                      | WhiteRAL 9000                |
|                             | Grey RAL 7001                |
| Treatments Aluminium Dipole | Alodine 1200                 |
| Treatments Base             | Alodine 1200 - Poulder paint |
| Working temperature         | -35C +70C                    |

## ELECTRICAL FEATURES

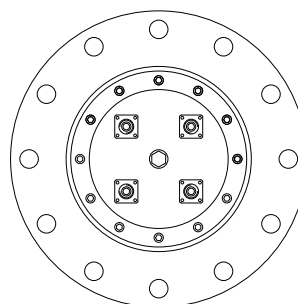
|                             |                          |
|-----------------------------|--------------------------|
| Frequency                   | 385-470 Mhz              |
| Lighting protection         | Yes                      |
| Gain                        | 2 dbi each dipole        |
| DC Ground                   | Yes                      |
| Bandwith at SWR <2.0        | 175 Mhz                  |
| SWR                         | 2:1 all the band         |
| Max Power                   | 200W                     |
| Polarization:               | Vertical                 |
| Horizontal Irradiation      | 360°                     |
| Vertical irradiation        | 78°                      |
| Gain                        | 0 db on half wave dipole |
| Separation between elements | >25                      |

| Model                               | 11314      | 11311      | 11312      |
|-------------------------------------|------------|------------|------------|
| Dipoles                             | 2          | 3          | 4          |
| length                              | 2,40 mt    | 3,80 mt    | 5,20 mt    |
| Weight                              | 35 Kg      | 45 Kg      | 53Kg       |
| Connector                           | 2xN female | 3xN female | 4xN female |
| Max wind resistance with radial ice | 350 Km/h   | 265 Km/h   | 220 Km/h   |
| Max load at 150Km/h wind            | 25 daN     | 38 daN     | 55 daN     |

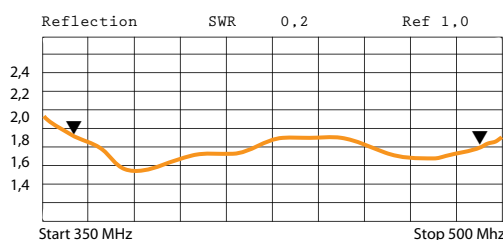
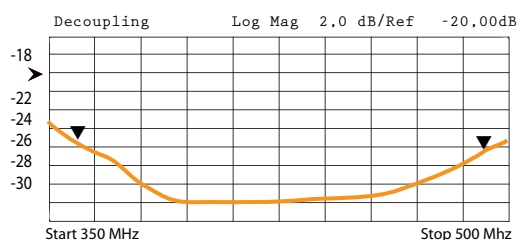


FLANGE dia 265 mm  
6 holes dia 18 mm on 225 mm dia  
waterproof o-ring gasket  
from 2 to 5 N female connector

Option 1



FLANGE dia 320 mm  
12 holes dia 21 mm on 280 mm dia  
waterproof o-ring gasket  
from 2 to 5 N female connector



## VHF - UHF COUPLER

code 18102  
code 18104  
code 18202  
code 18203  
code 28204

136-175 antenna coupler 2 way  
136-175 antenna coupler 4 way  
385-470 antenna coupler 2 way  
385-470 antenna coupler 3 way  
385-470 antenna coupler 4 way

### MODEL

| Code        | 18102                       | 18104       | 18202                                            | 18203       | 18204       |
|-------------|-----------------------------|-------------|--------------------------------------------------|-------------|-------------|
| Frequency   | 136-175 Mhz                 | 136-175 Mhz | 136-175 Mhz                                      | 136-175 Mhz | 385-470 Mhz |
| Contruction | cable                       | cable       | circuit                                          | circuit     | circuit     |
| Power       | 500 W                       | 500 W       | 200 W                                            | 200 W       | 200 W       |
| Weigh       | 0,6 Kg                      | 1,0 Kg      | 0,5 Kg                                           | 0,5 Kg      | 0,5 Kg      |
| Connection  | N male                      | N male      | N female                                         | N female    | N female    |
|             | cable direct in the antenna |             | necessary to add the double N male antenna cable |             |             |

### MECHANICAL FEATURES

|                     |                                      |
|---------------------|--------------------------------------|
| Drawing:            | see the picture                      |
| Mast diameter       | 30-60 mm                             |
| Structure           | VHF stainless steel and RG-213 cable |
|                     | UHF Lexan and stainless steel        |
| Weight              | see the table                        |
| Working temperature | -35C +80C                            |

### ELECTRICAL FEATURES

|                |                               |
|----------------|-------------------------------|
| Frequency      | See the table                 |
| Coupler type   | VHF coaxial cable transformer |
|                | UHF printed circuit           |
| Impedance      | 50 Ohm                        |
| Insertion loss | 0,2 db                        |
| Max R.O.S.     | Max 1,20                      |
| Max power      | see the table                 |
| Connection     | see the table                 |
| DC closed      | No                            |





## HELMET PORTABLE GPS

code 13113

### MECHANICAL FEATURES

|                     |                                      |
|---------------------|--------------------------------------|
| Lenght              | 64 mm                                |
| Diameter            | 18 mm                                |
| Weight              | 25 gr                                |
| Connection          | 3 mt coax 3,5 mm cable               |
| Connector           | Male SMA or SMB or TNC or On Request |
| Fixing              | Velcro band                          |
| Working temperature | -50C +60C                            |

### ELECTRICAL FEATURES

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| Frequency                 | 1575.42 Mhz L1                                   |
| Antenna type              | Quadrifillar Helix                               |
| Impedance                 | 50 Ohm                                           |
| Gain                      | +25dbic (amplifier)                              |
| Polarization              | RHCP                                             |
| Power                     | 3-6 volts DC feed through connector + center pin |
| Supply                    | 15 mA                                            |
| Noise figure              | 1,2 db                                           |
| Imput 3rd intercept point | -10 dbm                                          |
| Antenna connector         | N female                                         |
| Max cable lenght RG-58    | 20 mt max                                        |
| Max cable lenght RG-213   | 40 mt max                                        |

**EASY  
MOUNT!!!**



## NAVY GPS ANTENNA

code 15113

### MECHANICAL FEATURES

|                     |                    |
|---------------------|--------------------|
| Lenght              | 12 cm              |
| Weight              | 50 gr              |
| Bottom diameter     | 90 mm              |
| Connector           | Female N Connector |
| Working temperature | -50C +60C          |

Mounting Navy version: 1"-14th female or 1" Gass Bolt

Mounting accessories in the last pages



|                 |                             |
|-----------------|-----------------------------|
| 01990           | 5BANDS GSM/UMTS             |
| Fiberglass whip | length 0,30 mt              |
| frequency       | see the list                |
| Power           | 20 W                        |
| Gain            | 3 db                        |
| Weight          | 330 gr                      |
| Fittings        | 1"-14 th male or 1"Gas bolt |
| Structure       | Epoxy fiberglass            |
| Finishing       | Poliurethane paint          |
| Termination     | Bottom N female             |

See the NAVY MOUNT at pages 53 -54

## GSM - UMTS

USA Frequency  
GSM 806 - 900 MHz

EUROPEAN Frequency  
GSM 840 - 960 MHz

Dedicated frequency for  
DCS - 1800 1710 - 1880 MHz

UMTS 1920 - 2170

PCS - 1900 1850 - 1990 MHz

**5 BANDS**



## UMTS

|                 |                             |
|-----------------|-----------------------------|
| 01992 UMTS      |                             |
| Fiberglass whip | length 1,00 mt              |
| frequency       | 1710 - 2170 Mhz             |
| Gain            | 3 db                        |
| Weight          | 400 gr                      |
| Fittings        | 1"-14 th male or 1"Gas bolt |
| Structure       | Epoxy fiberglass            |
| Finishing       | Poliurethane paint          |
| Termination     | Bottom N female             |

See the NAVY MOUNT at pages 53 -54



## WIFI

|                       |                            |
|-----------------------|----------------------------|
| Lenght                | 35 cm                      |
| Wheight               | 400 gr                     |
| Fittings              | 1"-14th male or 1"Gas bolt |
| Structure             | Epoxy fiberglass           |
| Finishing             | Polyurethane paint         |
| Frequency             | 2400-2500 Mhz              |
| Impedance             | 50 Ohm                     |
| Max Power             | 5 W                        |
| Polarization          | vertical                   |
| Connection            | 8 Dbi                      |
| Lightning protection: | DC Ground                  |
| Connector             | N female                   |
| Antenna Type          | Collinear Dipoles          |

## WIFI

### 2188-1 WIRELESS 150N 2.0 High Speed USB ANTENNA

This High gain 2,4 Ghz antenna is perfect for your WiFi-WLan or 802.11 application. High Velocity of Data Transmission - to 150Mbps supports the AP software function (transform the user of wireless network in one access point)

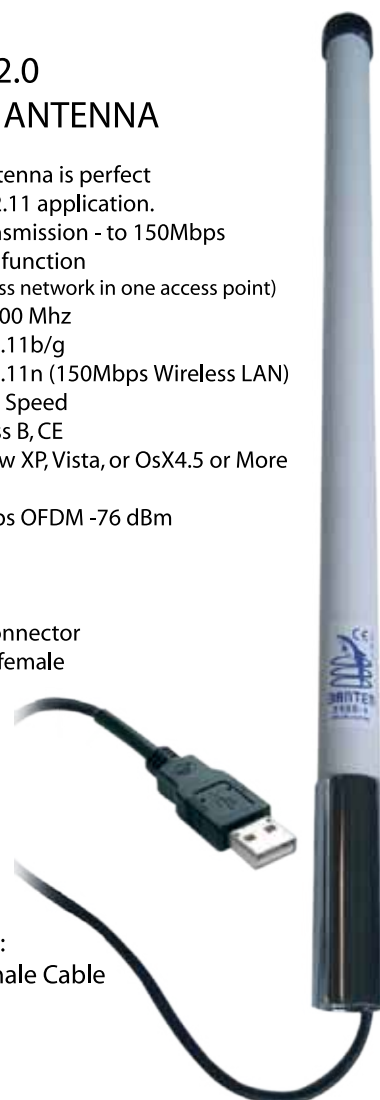
|                  |                                     |
|------------------|-------------------------------------|
| Frequency        | 2400-2500 Mhz                       |
| WiFi             | IEEE 802.11b/g                      |
| compatible to    | IEEE 802.11n (150Mbps Wireless LAN) |
| USB Interface    | 2.0 High Speed                      |
| Certifications   | FCC Class B, CE                     |
| Required Systems | Window XP, Vista, or OsX4.5 or More |
| Power TX         | 17 dbm                              |
| RX sensitivity   | 150 Mbps OFDM -76 dBm               |
| DC Closed        | Yes                                 |
| Lenght           | 0,60 mt                             |
| Wheight          | 250 gr                              |
| Termination      | USB2 Connector                      |
| Ferrule          | 1-14 Th female                      |

#### INCLUDED:

- Antenna
- 5 mt cable
- CD
- Instruction Manual

#### OPTIONAL Accessories:

- Amplified USB-USB female Cable
- USB / Lan Convertitor



# WiFi BULLET

## 2<sup>nd</sup> GENERATION

code 2188-2

With integrated transmitter

more powerful

12 dB gain

### MECHANICAL FEATURES

|                  |                                      |
|------------------|--------------------------------------|
| Length           | 100 cm                               |
| Weight           | 500                                  |
| Sections         | 1                                    |
| Structure        | Epoxy fiberglass                     |
| Finishing        | Polyurethane paint                   |
| Colour           | White Ral                            |
| Chromium plating | 20m copper,<br>20m nickel, 5m chrome |
| Fittings         | 1"-14 th female                      |

### ELECTRICAL FEATURES

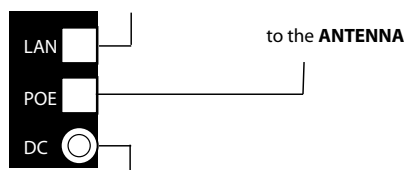
|                       |                                       |
|-----------------------|---------------------------------------|
| Antenna Type          | 12 db Collinear                       |
| Frequency             | 2,4 - 2,5 Mhz                         |
| Polarization          | Vertical                              |
| Power RF              | 1 W                                   |
| Power Supply          | 12 V DC feed through connector (POE)  |
| Supply                | 7 W                                   |
| Connector             | RJ45 10/100 base T Ethernet IEEE802,3 |
| waterproof protection | yes                                   |
| Lighting protection   | yes                                   |
| DC closed             | yes                                   |

### POE



12 V DC

HUB/SWITCH/PC or ROUTER ethernet



POWER SUPPLY 12 V DC



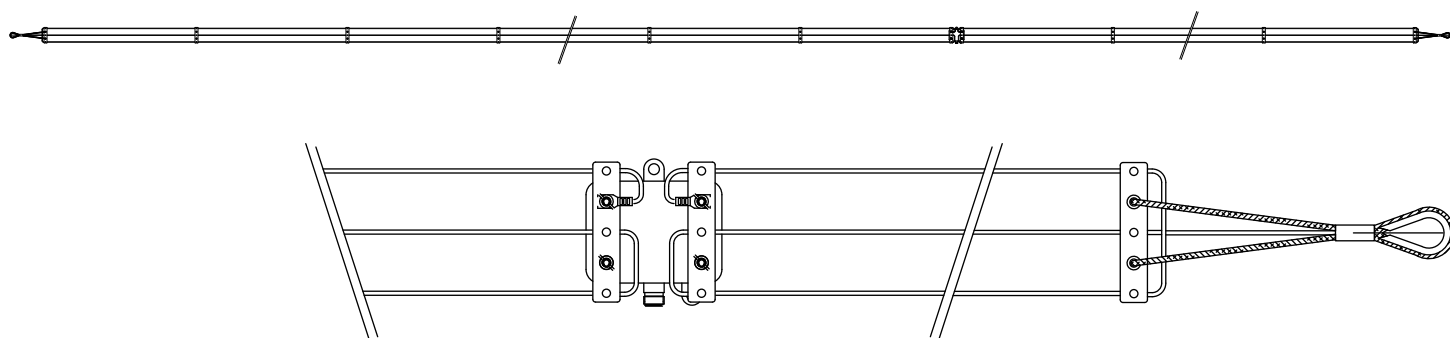
RJ45 10/100 base T Ethernet IEEE802,3

## WIDE BAND DIPOLE ANTENNA

1,6 - 30 MHZ

code 13012

- Ultra-light portable dipole antenna
- Short dimension
- No simmetrical
- Wide band
- Radiating element Polyester core with copper tinned with insulation cover
- Center Junction in with BNC connection plastic mould
- Feeding cable 20 mt RG-58 with BNC male connector and cable support
- Support Polithene Rope 20 + 20 mt with lead throwing end

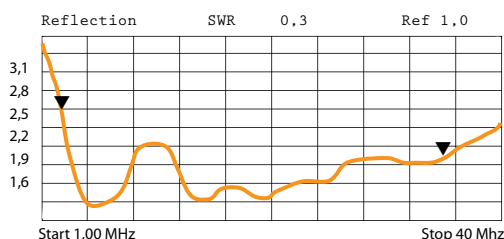


### MECHANICAL FEATURES

|                         |                               |
|-------------------------|-------------------------------|
| Total Length            | 29 mt                         |
| Long radiating element  | 19 mt                         |
| Short radiating element | 10 mt                         |
| Wire diameter           | 3 mm                          |
| Support Rope            | 2 x 20 mt polithene rope 3 mm |
| weight                  | 3 Kg                          |
| Working temperature     | -35C +80C                     |

### ELECTRICAL FEATURES

|                     |              |
|---------------------|--------------|
| Frequency           | 1,6 - 30 Mhz |
| Impedance           | 50 ohm       |
| SWR                 | < 2,5        |
| Max Power           | 400 W        |
| Connection          | BNC female   |
| Lighting protection | No           |
| DC closed           | No           |



### COMPONENTS

|                  |                              |
|------------------|------------------------------|
| Short arm        | 1 x 19 mt +20 mt rope        |
| Long arm         | 1 x 10 mt + 20 mt rope       |
| Baloon           | 1 pcs                        |
| Connection cable | 1 x 20 mt RG-58 + 2 BNC male |
| Guy pages        | 2 pcs                        |

### ENVIRONMENTAL SPECIFICATION

|                                                                                    |
|------------------------------------------------------------------------------------|
| Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E |
| Vibration resistance in accordance with MIL-STD 167-1                              |
| Shock resistance in accordance with MIL-STD 810E                                   |
| Treatments and paintings in accordance with MIL-T-704                              |

- Ultra-light portable dipole antenna
- Adjustable resonant Frequency
- Radiating element Polyester core with copper tinned with insulation cover
- Center Junction in with BNC connection plastic mould
- Feeding cable 10 mt RG-58 with BNC male connector and cable support
- Support Polithene Rope 20 + 20 mt with lead throwing end
- Connector to use as a monopole with ATU



## MECHANICAL FEATURES

|                     |               |
|---------------------|---------------|
| Min. Length         | 3 mt (30 Mhz) |
| Max. Length         | 46 mt (2 Mhz) |
| Wire diameter       | 3 mm          |
| Weight              | 1 Kg          |
| Working temperature | -35C +80C     |
| Wind resistance     | 200 Km/h      |

## ELECTRICAL FEATURES

|                     |            |
|---------------------|------------|
| Frequency           | 2 - 30 Mhz |
| Impedance           | 50 ohm     |
| SWR                 | < 2,0      |
| Max Power           | 400 W      |
| Lighting protection | No         |
| DC closed           | No         |

## ENVIRONMENTAL SPECIFICATION

|                                                                                    |
|------------------------------------------------------------------------------------|
| Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E |
| Vibration resistance in accordance with MIL-STD 167-1                              |
| Shock resistance in accordance with MIL-STD 810E                                   |
| Treatments and paintings in accordance with MIL-T-704K                             |

**1,20 mt (4') elements**

- Standard Thread Mount
- All the Contact Elements insulated 10 KV at antenna mount
- No Metal Parts out with antenna mounted
- 1,30 mt (4') open element


**MECHANICAL FEATURES**
**ELECTRICAL FEATURES**

|                     |                       |                     |                                  |
|---------------------|-----------------------|---------------------|----------------------------------|
| Antenna structure   | Epoxy fiberglass      | Frequency TX        | 1,5 - 30 Mhz with ATU            |
| Ferrule             | chrome plated brass   | Frequency RX        | 0,1 - 30 Mhz with RX transformer |
| Finishing           | Polyurethane paint    | Max Power           | 1000 W                           |
| Colour              | Green Nato IR         | Polarization        | Vertical                         |
| Chromium plating    | 20m copper,           | Insulation Elements | 10 KV                            |
|                     | 20m nickel, 5m chrome | Insulation Base     | 10 KV                            |
| Working temperature | -35C +80C             | Max wind speed      | 150 Km/h                         |

| Code    | Elements       | Diameter | T.th male         | B.th female       | Lenght       | Wheight |
|---------|----------------|----------|-------------------|-------------------|--------------|---------|
| 13036-1 | TIP<br>Elem. 1 | 12 mm    | -                 | 1/4"x 8th (7 mm)  | 1,20mt(4')   | 120 gr  |
| 13036-2 | Elem. 2        | 18mm     | 1/4"x 8th (7 mm)  | 1/2"x 8th (12 mm) | 1,30mt(4'3") | 200 gr  |
| 13036-3 | Elem. 3        | 18mm     | 1/2"x 8th (12 mm) | 1/2"x 8th (12 mm) | 1,30mt(4')   | 300 gr  |
| 13036-4 | Elem. 4        | 33mm     | 1/2"x 8th (12 mm) | 1"x 8th (24 mm)   | 1,30mt(4')   | 500gr   |
| 13036-5 | Elem. 5        | 33mm     | 1"x 8th (24 mm)   | 1"x 8th (24 mm)   | 1,30mt(4')   | 500gr   |

|            | Sections | 13036-1 | 13036-2 | 13036-3 | 13036-4 | 13036-5 | Lenght        | Wheight | Base th.   | Torsion | Config.     |
|------------|----------|---------|---------|---------|---------|---------|---------------|---------|------------|---------|-------------|
| 13036 - 12 | 3        | 1       | 1       | 1       | -       | -       | 3,60 mt (12') | 520 gr  | 12mm(1/2") | 45N     | mobile      |
| 13036 - 16 | 4        | 1       | 1       | 2       | -       | -       | 4,80 mt (16') | 1,0 kg  | 12mm(1/2") | 65N     | mobile      |
| 13036 - 20 | 5        | 1       | 1       | 1       | 1       | 1       | 6,00 mt (20') | 1,2 Kg  | 12mm(1/2") | 100N    | mobile      |
| 13036 - 24 | 6        | 1       | 1       | 1       | 1       | 2       | 7,20 mt (24') | 3,0 Kg  | 24mm(1")   | 150 N   | stazionario |
| 13036 - 32 | 8        | 1       | 1       | 1       | 1       | 4       | 9,60 mt (32') | 4,6 Kg  | 24mm(1")   | 250 N   | stazionario |


**Fast insert round threads standard**

**Flag rings**

**Ring for tying antenna over the vehicle**

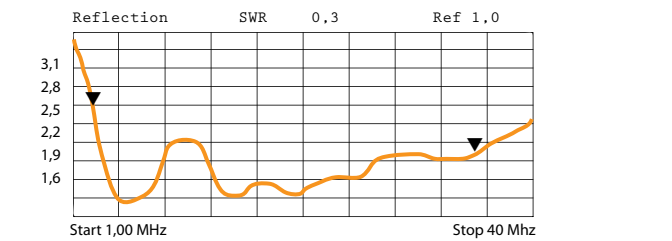


WIDE BAND VERTICAL WHIP ANTENNA    2 - 60 MHZ    code 13136-XX

- Ultra-light portable VERTICAL WHIPAntenna
- Short dimension
- 50 Ohm not necessary tuner
- Wide band
- N connector at the bottom
- Support Polithene Rope 3X

| ELECTRICAL FEATURES |          |
|---------------------|----------|
| Frequency           | 2-60 Mhz |
| Impedance           | 50 ohm   |
| SWR                 | < 2,5    |
| Max Power           | 150 W    |
| Connection          | N female |
| Lighting protection | No       |
| DC closed           | No       |

| ENVIRONMENTAL SPECIFICATION                                                        |  |
|------------------------------------------------------------------------------------|--|
| Temperature, salt, ice, sun irradiation resistance in accordance with MIL-STD 810E |  |
| Vibration resistance in accordance with MIL-STD 167-1                              |  |
| Shock resistance in accordance with MIL-STD 810E                                   |  |
| Treatments and paintings in accordance with MIL-T-704                              |  |



- Elements
- code 13036-1
  - code 13036-2
  - code 13036-3
  - code 13036-4
  - code 13036-5 :    see the table

|            | Sections | 13036-5 | Freq        | Lenght        | Weight |
|------------|----------|---------|-------------|---------------|--------|
| 13136- 16  | 4        | 0       | 10 - 60 Mhz | 4,80 mt (16') | 4,5 Kg |
| 13136 - 24 | 6        | 2       | 5 - 30 Mhz  | 7,20 mt (24') | 6,0 Kg |
| 13136 - 32 | 8        | 4       | 2 - 20 Mhz  | 9,60 mt (32') | 8,8Kg  |



| KIT COMPOSITION |                                                       |
|-----------------|-------------------------------------------------------|
| 1               | Base                                                  |
| 3               | Guy ropes                                             |
| 3               | Ground stakes                                         |
| 1               | Hammer                                                |
| 1               | Canvas case with 8 pocket<br>for the antenna elements |

# LAND STATIONARY ELEMENT ANTENNA KIT

## necessary to add the antenna element

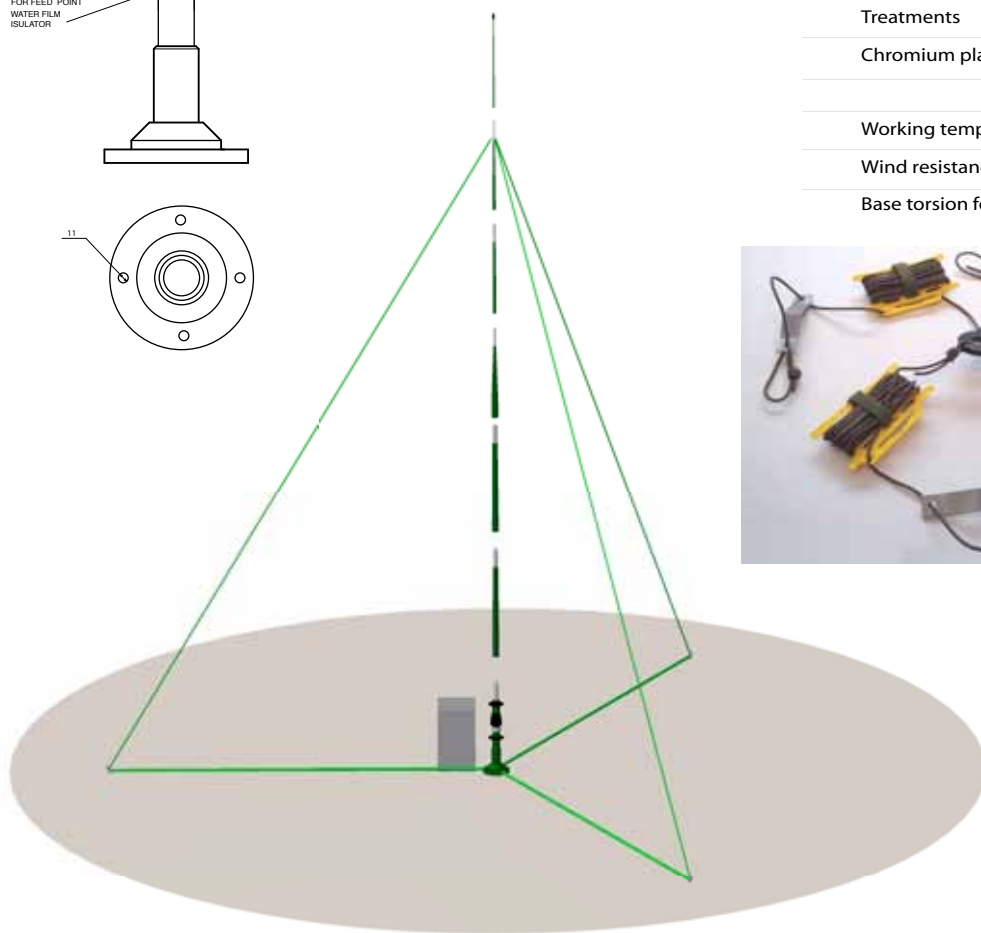
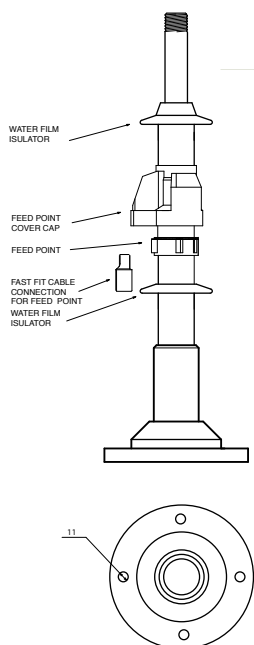
**code 13026**

### ELECTRICAL FEATURES

|                     |              |
|---------------------|--------------|
| Frequency           | 1,6 - 30 Mhz |
| Impedance           | with ATU     |
| Max Power           | 1000 W       |
| Polarization        | Vertical     |
| Connection          | Fast for ATU |
| Lighting protection | No           |
| DC closed           | No           |

### MECHANICAL FEATURES

|                     |                       |
|---------------------|-----------------------|
| Length              | 7,20 - 9,60 mt        |
| Weight              | see the table         |
| Bottom diameter     | 35 mm                 |
| Base Installation   | Standard NATO         |
| Structure           | Epoxy fiberglass      |
| Finishing           | IR paint              |
| Colour              | Green Nato IR         |
| Treatments          | Black galvanization   |
| Chromium plating    | 20m copper            |
|                     | 20m nickel, 5m chrome |
| Working temperature | -35C +80C             |
| Wind resistance     | 200 Km/h              |
| Base torsion force  | see the table         |



### KIT COMPOSITION

- 1 Base
- 3 Guy ropes
- 6 Ground stakes
- 1 Ground radial kit
- 1 Hammer
- 1 Canvas case with 8 pocket for the antenna elements

Create your own antenna- 13036-1 and 13036-2 supplied as standard:

|            | Sections | 13036-3 | 13036-4 | 13036-5 | Lenght        | Wheight | Base th. | Torsion | Config.    |
|------------|----------|---------|---------|---------|---------------|---------|----------|---------|------------|
| 13036 - 24 | 6        | 1       | 1       | 2       | 7,20 mt (24') | 3,0 Kg  | 24mm(1") | 150 N   | stazionary |
| 13036 - 32 | 8        | 1       | 1       | 4       | 9,60 mt (32') | 4,6 Kg  | 24mm(1") | 250 N   | stazionary |



### ELECTRICAL FEATURES

|                           |                                                  |
|---------------------------|--------------------------------------------------|
| Frequency                 | 1575.42 Mhz                                      |
| Antenna type              | Pach.                                            |
| Impedance                 | 50 Ohm                                           |
| Gain                      | +25dbic (amplifier)                              |
| Polarization              | RHCP                                             |
| Power                     | 3-6 volts DC feed through connector + center pin |
| Supply                    | 15 mA                                            |
| Noise figure              | 1,2 db                                           |
| Imput 3rd intercept point | -10 dbm                                          |

## VHF - UHF 1/4 wave - VEHICULAR WHIP

- Mobile antenna mono band
- With or without sock spring
- Stainless steel or fiberglass Whip
- Turnable whip by cutting diagram
- Factory turnable according to specific  
custom frequency
- 180° tilting whip

```
code 18010
code 18110
code 18020
code 18120
code 18021
code 18121
code 18030
```

|     |                                |
|-----|--------------------------------|
| 1/4 | 60-80 Mhz shock spring         |
| 1/4 | 60-80 Mhz shock spring fiber   |
| 1/4 | 136-175 Mhz                    |
| 1/4 | 136-175 Mhz fiberglass         |
| 1/4 | 136-175 Mhz shock spring       |
| 1/4 | 136-175 Mhz shock spring fiber |
| 1/4 | 385-470 Mhz                    |

## MODEL

| Code                       | 18010         | 18110         | 18020           | 18120           | 18021           | 18121           | 18030           |
|----------------------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Frequency                  | UHF 60-80 Mhz | VHF 60-80 Mhz | VHF 136-175 Mhz | VHF 136-175 Mhz | VHF 136-175 Mhz | VHF 136-175 Mhz | VHF 385-470 Mhz |
| Bandwithdt at lowest freq. | 1 Mhz         | 3 Mhz         | 3 Mhz           | 3 Mhz           | 3Mhz            | 3Mhz            | 6,5 Mhz         |
| Sock spring                | YES           | YES           | NO              | NO              | YES             | YES             | NO              |
| Length lowest freq         | 1,50 mt       | 1,50 mt       | 0,540 mt        | 0,540 mt        | 0,540 mt        | 0,540 mt        | 0,20 mt         |
| Weigh                      | 350 gr        | 300 gr        | 250 gr          | 200 gr          | 200 gr          | 200 gr          | 150 gr          |
| Whip Material              | inox          | fiber         | inox            | fiber           | inox            | fiber           | inox            |

## MECHANICAL FEATURES

|                     |                                                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------|
| Length:             | see the table                                                                                   |
| Base diameter       | 40 mm                                                                                           |
| Mounting hole       | 24 mm                                                                                           |
| Weight              | see the table                                                                                   |
| Base material       | Chrome plated brass                                                                             |
| Whip material       | Stainless steel 17/7 pH standard<br>Fiberglass Grey RAL 7001<br>other colour on special require |
| Mount               | On conductive surface                                                                           |
| Working temperature | -35C +80C                                                                                       |

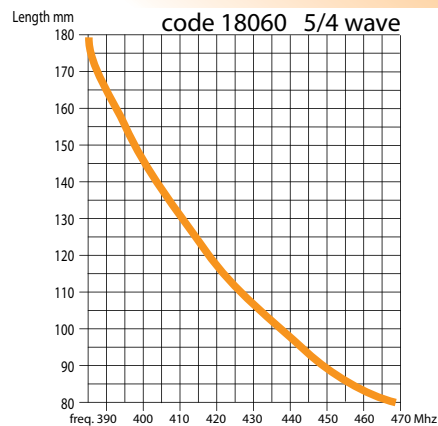
## ELECTRICAL FEATURES

|              |                      |
|--------------|----------------------|
| Frequency    | See the table        |
| Bandwidth    | See the table        |
| Antenna type | 1/4 wave whip mobile |
| Impedance    | 50 Ohm unbalanced    |
| Gain         | 2 dbi                |
| Max R.O.S.   | Max 1,50 in band     |
| Max power    | 100 W                |
| Polarization | Vertical             |
| Connection   | 5 mt cable RG-58     |
| DC closed    | No                   |



code 18140 5/8 wave stainless steel spare part whip  
code 18140-1 5/8 wave fiberglass spare part whip

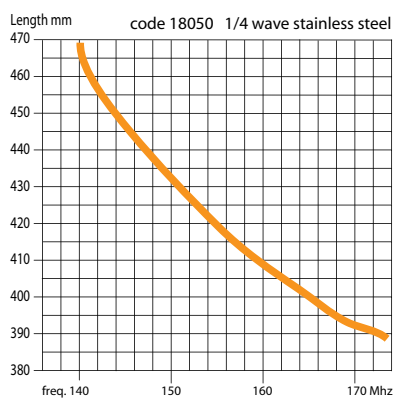
code 18160 5/4 wave stainless steel spare part whip



code 18011

code 18030

code 18150 5/8 wave stainless steel spare part whip



code 18020-18021

# VHF - UHF 5/8 - 5/4 wave - VEHICULAR WHIP

- Mobile antenna mono band
- Stainless steel or fiberglass Whip
- Turnable whip by cutting diagram
- Factory turnable according to specific custome frequency
- 180° tilting whip

code 18040  
code 18140  
code 18060  
code 18050 biband

5/8 136-175 Mhz  
5/8 136-175 Mhz fiber  
5/4 385-470 Mhz  
1/4 140-175 Mhz  
5/8 385-470 Mhz

## MODEL

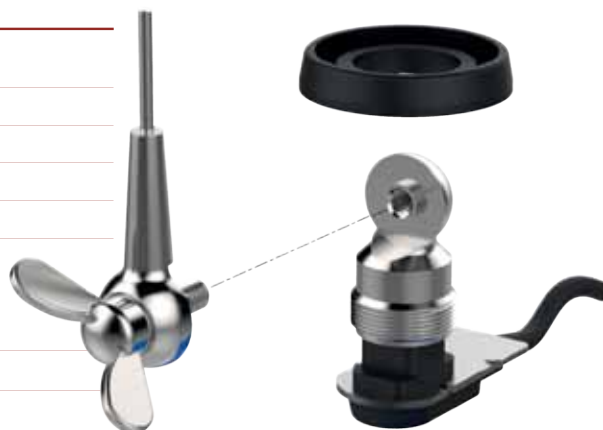
| Code                       | 18040       | 18140         | 18050        |             | 18060       |
|----------------------------|-------------|---------------|--------------|-------------|-------------|
| Frequency                  | 136-175 Mhz | 136 - 175 Mhz | 140 - 175Mhz | 385-470 Mhz | 385-470 Mhz |
| Antenna type               | 5/8 wave    | 5/8 wave      | 1/4 wave     | 5/8 wave    | 5/4 wave    |
| Gain                       | 3 db        | 3 db          | 0 db         | 3 db        | 4 db        |
| Bandwithdt at lowest freq. | 6,5 Mhz     | 6,5 Mhz       | 2 Mhz        | 8 Mhz       | 8 Mhz       |
| Length lowest freq         | 1,40 mt     | 1,40 mt       | 0,47 mt      |             | 0,45 mt     |
| Weigh                      | 500 gr      | 500 gr        | 320 gr       |             | 250 gr      |
| Whip                       | inox        | fiber         | inox         |             | inox        |



GPS accessory  
Available

## MECHANICAL FEATURES

|                     |                                                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------|
| Length:             | see the table                                                                                   |
| Base diameter       | 40 mm                                                                                           |
| Mounting hole       | 24 mm                                                                                           |
| Weight              | see the table                                                                                   |
| Base material       | Chrome plated brass                                                                             |
| Whip material       | Stainless steel 17/7 pH standard<br>Fiberglass Grey RAL 7001<br>other colour on special require |
| Mount               | On conductive surface                                                                           |
| Working temperature | -35C +80C                                                                                       |

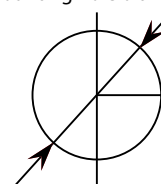


## ELECTRICAL FEATURES

|              |                        |
|--------------|------------------------|
| Frequency    | See the table          |
| Bandwithdt   | See the table          |
| Antenna type | see the table          |
| Impedance    | 50 Ohm unbalanced      |
| Max R.O.S.   | Max 1,50 in bandwithdt |
| Max power    | 100 W                  |
| Polarization | Vertical               |
| Connection   | 5 mt cable RG-58       |
| DC closed    | No                     |



mounting hole dia 24 mm

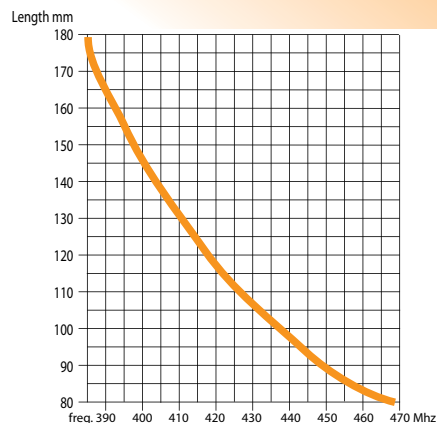


code 18000 standard base spare part  
with 5 mt RG-58  
(with FME connector option)

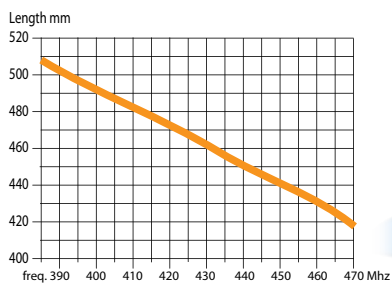
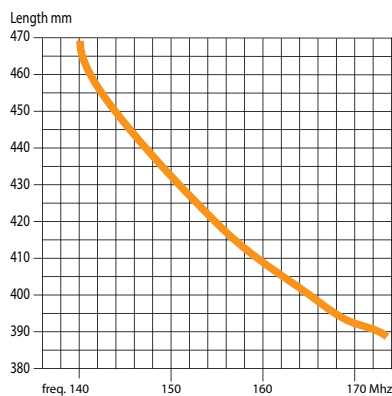




code 18040 inox  
code 18140 fiber



code 18050



code 18060

LOW PROFILE ANTENNA

code 11350      400 - 470 Mhz  
code 11351      860 - 960 Mhz

MECHANICAL FEATURES

|                               |                                           |                 |
|-------------------------------|-------------------------------------------|-----------------|
| Code                          | 11350                                     | 11351           |
| Dimension:                    | dia 110 x 80 h                            | dia 110 x 160 h |
| Weight                        | 920 gr                                    | 1100 gr         |
| Base material                 | Anticorodal 100                           |                 |
| Irradiation elements material | Stagnated brass                           |                 |
| Treatments                    | Alodine 1200                              |                 |
| Finishing                     | Polyester powder RAL 700333               |                 |
| Radome                        | Lexan® Polycarbonate 143R colour RAL 7001 |                 |
| Mount                         | On conductive surface                     |                 |
| Working temperature           | -35C +80C                                 |                 |
| Max front speed               | 400 Km/h                                  |                 |
| Wind resistance               | 200 Km/h                                  |                 |
| Protection                    | IP 67                                     |                 |
| Fittings                      | fixing bolts M10 S/S A2                   |                 |
| Gasket                        | OR 4375 in Viton FP75                     |                 |
| Rear flange                   | Dia 115 x sp. 3 S/S Aisi 304              |                 |



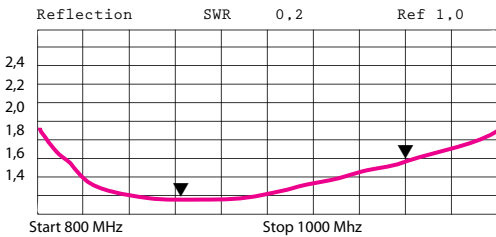
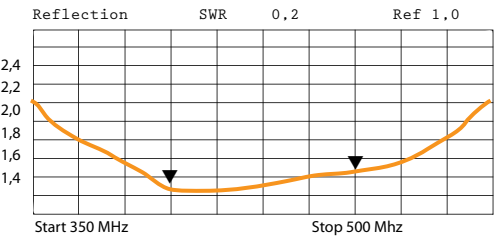
11350

ELECTRICAL FEATURES

|                        |                              |               |
|------------------------|------------------------------|---------------|
| Frequency              | 400 - 470 Mhz                | 870 - 960 Mhz |
| Impedance              | 50 Ohm                       |               |
| Gain                   | 0 db ref. antenna 1/4 lambda |               |
| Max R.O.S.             | Max 1,50 : 1,00 whole band   |               |
| Max power              | 100 W                        |               |
| Polarization           | Vertical                     |               |
| Horizontal Irradiation | 360°                         |               |
| Connection             | N female connector 90°       |               |
| Lighting protection    | Yes                          |               |
| DC closed              | Yes                          |               |



11351



# Mounting Accessories

1"-14 female thread



1"-14 female thread

15630 - BIG SPRING

material: Stainless steel  
Mounting: 1"-14 female thread



15533 - MAST L BRACKET

Material: Stainless steel  
Including: Mounting bolt



15195 - BOLT 1"-14 thread female

Material: chrome plated brass



for tube from dia 10 to dia 50 mm

620-2 LARGE BRACKET

Material: Stainless steel  
Including: 1 Mounting bolt  
Washer 1"-14

1"-14 female thread



15197  
1"-14 FEMALE THREAD MOUNT  
Material: Composite  
Hardware: Stainless Steel  
Weight: 0,7 Kg  
Mast dia: min 33mm (1") 66 mm (2")

1"G-11 Male thread



15198  
1"-11 MALE THREAD MOUNT  
Material: Composite  
Hardware: Stainless Steel  
Weight: 0,7 Kg  
Mast dia: min 33mm (1") 66 mm (2")

1"G-11 Male thread

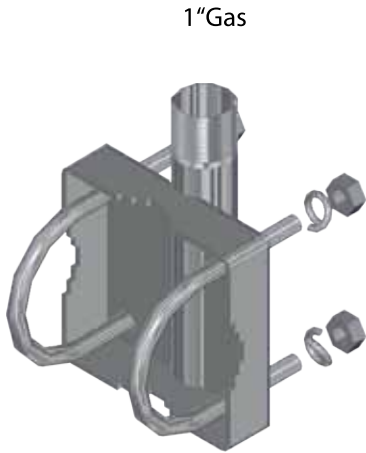


15199  
1"-11 MALE THREAD MOUNT  
Material: Stainless Steel  
Hardware: Stainless Steel  
Weight: 1,4 Kg  
Mast dia: min 33mm (1") 50 mm (1-3/4")

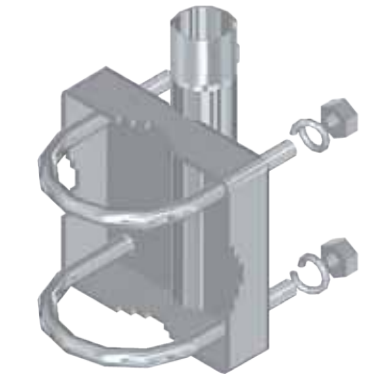
00617

## Rail BRACKET

S/S Bracket 1"Gas threaded tube  
for TU and Navy Mount  
stainless steel



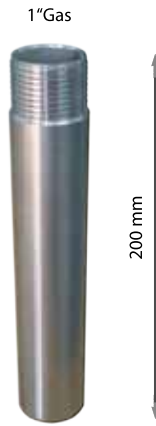
1"Gas



00504

## PIPE MOUNT

S/S tube 1"Gas standard  
To weld on structure  
stainless steel



1"Gas

200 mm

00502

## ADAPTER 4 WAY MOUNT

Adapter 1"Gas standard  
to 1"-14 female  
Chrome plated brass



1"Gas

150 mm

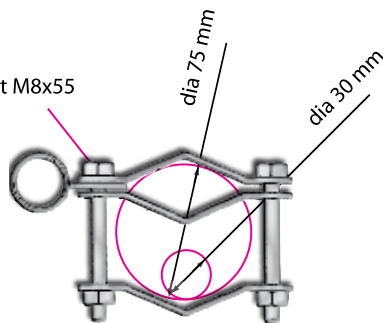
Cable exit

10503

S/S deck mount  
for TU antennas  
1"Gas standard



4 Bolt M8x55

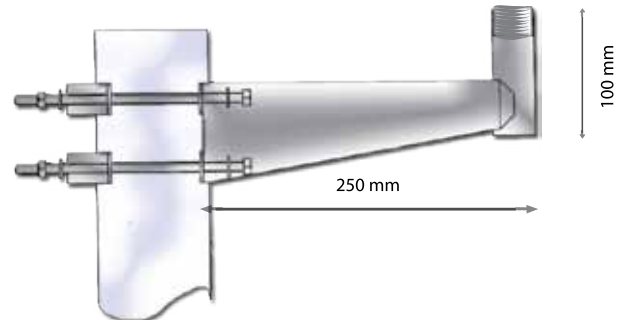


dia 75 mm

dia 30 mm

dia 25 to dia 100 mm

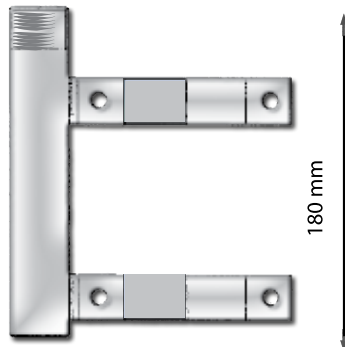
1"Gas



250 mm

100 mm

1"Gas



180 mm

11505

## PIPE BRACKET

S/S Bracket 1"Gas standard  
mout on pipe from 1"G up to 2"1/2G  
stainless steel aisi 304



00505

## STAND OFF BRACKET

S/S Bracket 1"Gas standard  
mout on pipe from 1"G up to 2"1/2G  
stainless steel

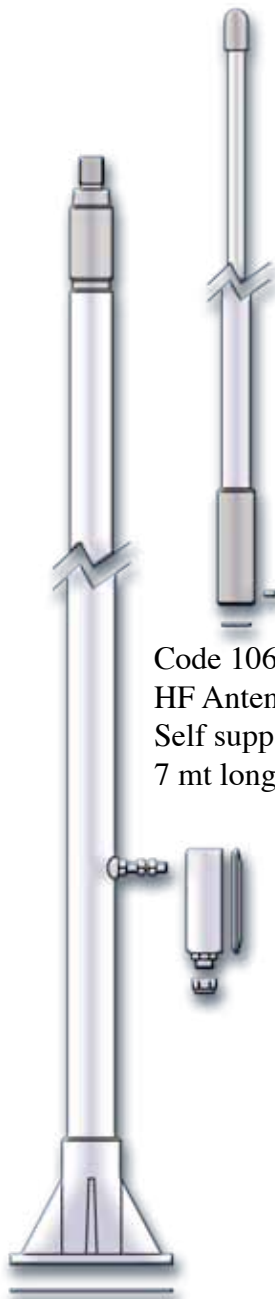


## From our Catalogues:

### MARINE:

VHF  
A.I.S.  
GSM  
WIFI  
CB  
HF  
UHF  
TV  
AM/FM  
NAVTEX  
GPS

See the website: [www.banten.com](http://www.banten.com)



Code 10607  
HF Antenna  
Self supp.  
7 mt long

Code 00006  
HF Antenna  
Self supp.  
7 mt long

Code 00247  
Vhf Antenna  
156-163 Mhz  
1,20 mt



Code 02011  
Vhf Antenna  
156-163 Mhz  
2,50 mt



Code 15209  
Vhf Navy Antenna  
156-163 Mhz  
1,20 mt







## LAND & MILITARY

NAVY VHF  
MODULAR HF  
MANPAK  
RC292  
NVIS  
TANK  
AIR  
GSM  
WIFI  
VHF/UHF DIRECTIVE  
YAGI  
PMR  
TETRA  
VEHICULAR  
AIR CONTROL  
TBT  
RADIO BEACON  
TV PANEL

Code 13010  
Ultra Light Dipole Antenna  
2-30 Mhz



Code 13035  
VHF TANK Antenna  
30-88 Mhz  
2,80 mt typical long



Code 13066  
VERI LARGE BAND  
Antenna  
1,0-6 Ghz  
0,25 mt

Code 13292  
AT-292/PRC  
20-80 Mhz  
12 mt (40ft)



Code 13028  
AS-3683 A/PRC  
30-108 Mhz  
1,90 mt (4,3ft)

Code 13027  
AS-4266 A/PRC  
30-108 Mhz  
2,46 mt (8ft)

See the website: [www.bantennas.com](http://www.bantennas.com)







SINCE  
1969

# Radio Antennas

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