

# FM DIPOLE CIRCULAR POLARIZATION ANTENNAS

## Mod. PLC4 – PLC4/H

This stainless antenna is particularly recommended for low and medium output power transmitter with circular polarization.

The PLC4 model can be disassembled and packed which reduces the size for easier transportation.

Mod. PLC 4



Mod. PLC 4R



|         |           |                                                         |
|---------|-----------|---------------------------------------------------------|
| F455.01 | PLC4/N    | Double-crossed Dipole Stainless steel, 600W Power rate  |
| F455    | PLC4/16   | Double-crossed Dipole Stainless steel, 1.5KW Power rate |
| F455.02 | PLC4/F    | Double-crossed Dipole Stainless steel, 1.5KW Power rate |
| F524.01 | PLC4/H/16 | Double-crossed Dipole Stainless steel, 2KW Power rate   |
| F524    | PLC4/H/F  | Double-crossed Dipole Stainless steel, 3KW Power rate   |
| F680    | RPLC4     | Reflector for Double-Cross Dipole model PLC4            |
| F681    | RPLC4/H   | Reflector for Double-Cross Dipole model PLC4/H          |

## Technical data FM Dipole Circular Polarization Antenna

### ELECTRICAL AND MECHANICAL DATA

|                                    |                                          |
|------------------------------------|------------------------------------------|
| TYPE                               | Circular PLC 4                           |
| FREQUENCY RANGE                    | 87,5 ÷ 108 MHz                           |
| INPUT CONNECTOR                    | N - 7/16 - 7/8"                          |
| BANDWIDTH                          | 87,5 ÷ 108 MHz                           |
| IMPEDANCE                          | 50 Ω                                     |
| POWER RATING                       | 500 W, 1500 W, 3000 W                    |
| SWR                                | ≤ 1.4:1                                  |
| POLARIZATION                       | Circular                                 |
| GAIN                               | -1.5 dB (Referred to Half - Wave Dipole) |
| H PLANE                            | Omnidirectional                          |
| V PLANE                            | Omnidirectional                          |
| LIGHTNING PROTECTION               | All metal parts are DC Grounded          |
| MAX WIND VELOCITY                  | 150 Km/h                                 |
| WIND LOAD (With speed at 150 Km/h) | 45 Kgs.                                  |
| WIND SURFACE                       | 0,1 SQM.                                 |

### MATERIALS

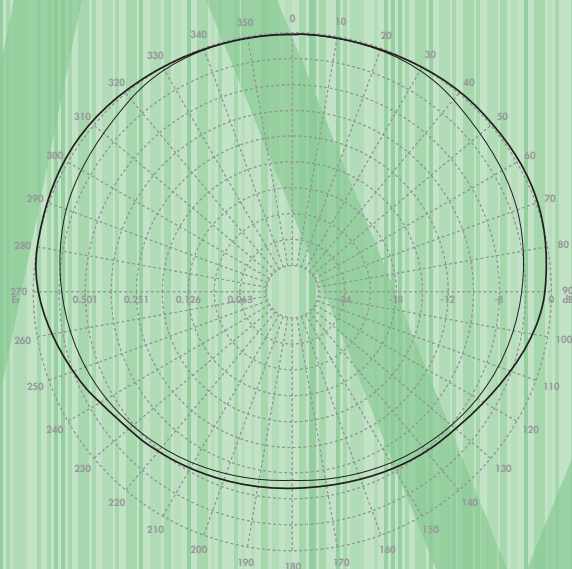
|                         |                              |
|-------------------------|------------------------------|
| INTERNAL PARTS          | Silver-plated brass and PTFE |
| EXTERNAL PARTS          | Stainless steel              |
| EXTERNAL INSULATOR      | PTFE                         |
| BRACKETS                | Hot Galvanized steel         |
| BOLTS AND SCREWS        | Galvanized steel             |
| CONNECTORS RUBBERCASING | Yes                          |
| MOUNTING                | From 60 to 120 mm. Ø.        |
| WEIGHT                  | 15 Kg.                       |
| DIMENSION (cm.)         | 152x124x115                  |
| PACKING (cm.)           | 160x15x15                    |

## DIPOLE CIRCULAR POLARIZATION ANTENNAS

| N° BAYS | DB GAIN | POWER GAIN | ANTENNA APERTURE (mt.) | WEIGHT (Kg.) | WIND LOAD<br>(v = 150 Km/h) |
|---------|---------|------------|------------------------|--------------|-----------------------------|
| 1       | -1,5    | 0,7        | 1,5                    | 15           | 45                          |
| 2       | 1,5     | 1,4        | 4,2                    | 30           | 90                          |
| 4       | 4,5     | 2,8        | 9,6                    | 60           | 180                         |
| 6       | 6,2     | 4,2        | 15                     | 90           | 270                         |
| 8       | 7,5     | 5,6        | 20,4                   | 120          | 360                         |

### Radiation Pattern PLC 4

— H Plane    .... VPlane



### Radiation Pattern PLC 4R

— H Plane    .... VPlane

