

# EM-6105 | Omni-Directional Wideband Discone Antenna



#### Features:

- Small Size
- Very wide frequency coverage
- Flat frequency response
- . High Immunity to overload

# Description

The EM-6105 is a broad band collinear array allowing very wide Omni-Directional frequency coverage in a single package. Below approximately 100 MHz, the EM-6105 acts as an active vertical rod which offers 10 to 12 dB more signal handling capability than competitive antennas (overload field strength: 2 V/meter) which greatly reduces intermodulation generated signals in a typical read world RF environment. In the congested spectrum above 100 MHz, the antenna is passive and contributes no intermodulation products so the overload point is determined solely by the receiving instrument. The immunity to overload can often make the difference between useful signal output and an indecipherable jumble of spurious products and is accomplished without compromising sensitivity. The antenna collapses for convenient storage and transport.

The EM-6105 is supplied with an EM-6106 battery pack.

# **Specifications**

#### Electrical

Frequency Range (calibrated): 10 kHz - 2 GHz

Impedance: 50 Ohms, nominal
Output Connector: Type N, male
Overload: 2 V/m below 50 MHz
(+5 dBm at output connector)

Power Source: 15 VDC supplied by external EM-6106 Battery Pack/Charger Module

Battery Life: 8 hours, nominal

Polarization: Vertical

## Mechanical

Height: W/o Upper Rod: 57.2 cm (22.5")

W/ Upper Rod:

Fully Collapsed: 82.6 cm (32.5")

Fully Extended: ≈203.2 cm (≈80")

Lower Radial Elements: 40.6 cm (16")

Upper Antenna Rod Length:

Fully Collapsed: 25.4 cm (10") Fully Extended: ≈144.8 cm (≈57")

Lower Radial Elements: 40.6 cm (16")

### Diameter:

Stowed Configuration: 11.4 cm (4.5")
Deployed Configuration: 45.7 cm (18")

Antenna Disk: 32 cm (12.6")

(Counterpoise)

Weight: 2 kg (4.5 lbs.)

Ref: 170727

Specifications subject to change without notice. Unless otherwise specified, product is manufactured in Johnstown, NY USA.

