

## Heavy Duty, High Vibration Panel Antennas, 7 dBic RFID & ISM



HD7 Series with Integral N Female (front)



Optional Pole Mount



HD7 Series with Integral N Female (back)

- Heavy-duty impact resistant; has passed industry standard shock & vibration tests
- Rated water proof “temporary emission” IP67
- Low profile design, less than 1” deep
- 7 dBic panel model for long range systems

Mobile Mark’s RFID Panel Antennas are perfect for RFID systems, as well as other applications in the ISM band. They are designed to operate in close proximity to metal, which normally has a tendency to detune antennas.

When an extremely rugged antenna is needed for use in the harshest conditions, then the HD7 antenna are the antennas of choice. They are the most rugged antenna designed to date and have surpassed every test thrown at them, including being run over by a car.

The HD7 Series antennas are circularly polarized, US models are RHCP (Right Hand Circularly Polarized) and European models are LHCP (Left hand Circularly Polarized). Because of the circular polarization, the orientation of the RFID tag antenna will not affect the performance of readers. With 7 dBic gain, these antennas provide significant performance improvements over a micro-sized patch.

They can be mounted in any setting, including directly against metal, and can be used indoors or outdoors. Please note that the integral N Female connector is mounted on the back of the antenna.

The HD7 antennas are compact and aesthetically pleasing, measuring only 8.25” H x 8.25” W x .75”D (21 cm x 21 cm x 1.9 cm). Not only is the radome attractive, it is also the toughest RFID antenna that we have designed and produced to date.

The antennas are provided with 4 corner holes with metal reinforcing bushings for mounting flush to a surface. This mounting style provides the most versatile mounting options for this product, while maintaining the impact ability.

The HD7 Series has a DC shorted front end and is compatible with antenna sensing circuits found in the current generation of RFID readers.

Model #	Description
HD7-915RCP	Panel, N female, US 902-928 MHz
HD7-868LCP	Panel, N female, EU 865-870 MHz
HD7-915RCP-PM	Panel includes Pipe mount
HD7-868LCP-PM	Panel includes Pipe mount

Specifications			
Frequency:	902 - 928 MHz (US) 865-870 MHz (EU)	Radome Size:	8.25” Hx 8.25” Wx 3/4” D (21 cm x 21 cm x 1.9 cm)
Gain:	7 dBic maximum	Weight:	1.5 lbs (0.5 kg)
Axial Ratio:	3 dB Max	Antenna Radome:	Black ASA
VSWR:	1.5:1 max over range	Connector:	Special heavy duty N female
Impedance:	50 Ohm nominal	Sensing type:	DC Shorted
Maximum Power:	20 Watts	Shock & Vibration:	EN 61373, IEEE 1478, MIL-810G TIA-329.2-C
Beamwidth:	75° elevation, 75° azimuth	Dust/Water Ingress:	IP67
Operating Temp:	-40°C to +85°C		
Mounting:	4 Hole Corner Mount with metal reinforcing bushings 5/16 inch diam (8 mm)		
Pipe Mount (optional):	Mounts up to 2.5” diam 5.1 cm		