

Broadband In-Building Antenna [380-6000 MHz]

PEAR™ S5491i

Description:

- Ceiling mount omni directional antenna for in-building applications such as DAS.
- The antenna is vertically polarized and operates at 380-6000 MHz supporting also public safety frequencies (TETRA).



380-520, 617-960, 1695-6000 MHz Omni SISO Antenna

Electrical Specifications

Frequency Band [MHz]	380-520	617-698	698-790	790-960	1695-2200	2300-2700	2700-6000
Input Connector Type	1x N-Type (F) or 1x 4.3-10 DIN (F) with cable (12", 30 cm)						
VSWR/Return Loss	< 3:1/6.0 dB	< 2.1:1/9.0 dB	< 2:1/9.5 dB	< 2:1/9.5 dB	< 1.8:1/10.9 dB	< 1.8:1/10.9 dB	< 2.2:1/8.5 dB
VSWR* / Return Loss* with 60x60cm ext. baseplate	<1.7:1/11.8 dB	<1.5:1/14.0 dB	<1.5:1/14.0 dB	<2.0:1/9.5 dB	<1.9:1/10.1 dB	<2.0:1/9.5 dB	<2.2:1/8.5 dB
Impedance	50 Ω						
Polarization	Vertical						
Horizontal Beamwidth	Omni (360°)						
Gain	0 - 1.5 dBi	1 - 2 dBi	1.5 - 2.5 dBi	2.0 - 3.5 dBi	5.0 - 7.0 dBi	4.0 - 7.0 dBi	5.0 - 6.0 dBi
Gain* with 60x60cm ext. baseplate	2.0 - 4.0 dBi	3 - 4 dBi	1.5 - 3.5 dBi	3.0 - 4.0 dBi	5.0 - 7.0 dBi	4.0 - 7.0 dBi	5.0 - 6.0 dBi
Max Power / Port	50 Watts at ambient temperature 77°F (25°C)						
PIM @ 2x43 dBm	<-153 dBc for 4.3-10 DIN <-150 dBc for N-Type						

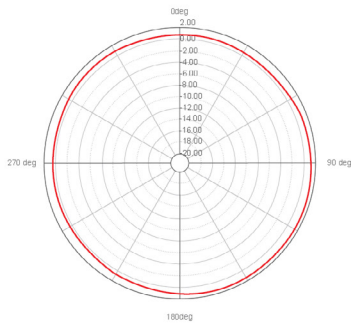
* An External Base Plate (Part#27-272-09) is highly recommended to be used with the antenna for better gain and VSWR/RL for the public safety band.

Mechanical Specifications

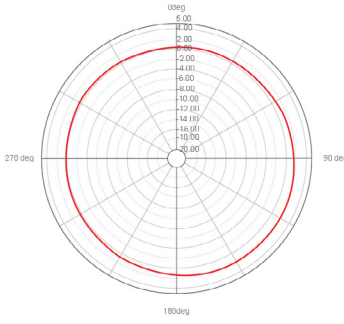
Operating Temperature	-40° to 158°F (-40° to +70°C)
Environmental Conditions	Indoor
Antenna Weight	1.65 lbs (750g)
Antenna Dimensions (Diameter / Height)	13.2" / 4.88" (335 / 124mm)
Radome Material	PC/ABS (halogen free)
Radome Color	RAL 9016 (white)*
Outdoor Ingress Protection	IP65
Flammability rating	UL 94-V0
RoHS	Compliant
Cable	Plenum Rated
Approved for use in Plenum Space	Listed & tested by Intertek ETL

* Radome can be painted with recommended paint "Krylon fusion for plastic"

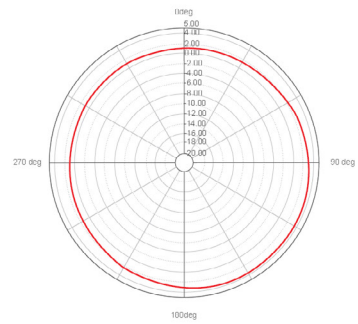
Antenna Patterns



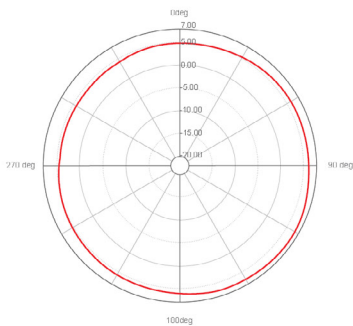
410 MHz



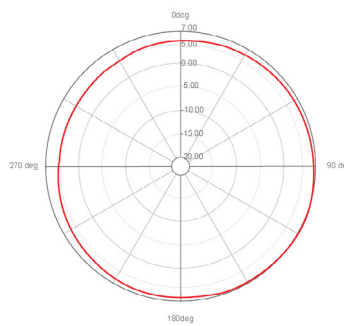
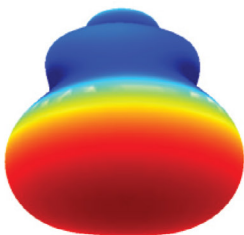
710 MHz



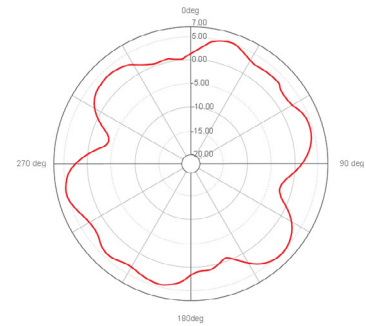
850 MHz



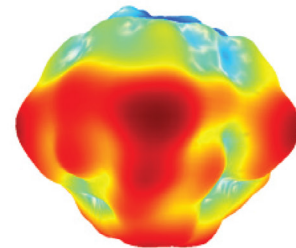
1910 MHz



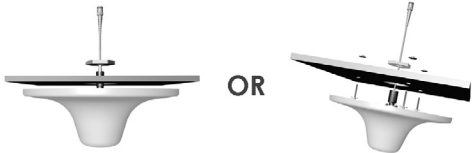


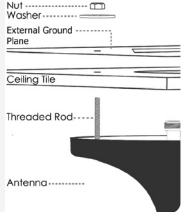
2500 MHz



5500 MHz



Part Numbers, Ordering Options and Accessories

Description:	Part Number:
Antenna with 1x N-Type (F) Connectors - Below Ceiling	02121304-05491U
Antenna with 1x 4.3-10 DIN (F) Connectors - Below Ceiling	02130304-05491U
Mounting Options:	Part Number:
<p>Below Ceiling Mounting kit (included)</p> <p>Fasteners for below suspended ceiling mounting included with antenna. Maximum ceiling thickness 1.18"(30mm). Drill a hole with a 1.18"(30mm) diameter into suspended ceiling and secure the antenna with supplied plastic nut.</p> <p>Optionally the antenna can be installed below a suspended ceiling by using the provided M4 Threaded rod (x3) and M4 nuts.</p> <p>Included with antenna</p>	
<p>Through Ceiling Mounting Bracket (Optional)</p> <p>Through ceiling mounting conceals the antenna with only the nose protruding through the ceiling. The base plate is hidden above the false ceiling which results in a 40% reduction of the visible antenna footprint.</p>	 <p>62-17-09</p>
<p>Above Ceiling Mounting Bracket (Optional)</p> <p>The antenna can be installed above a suspended ceiling by using the optional above ceiling mounting bracket.</p>	 <p>62-40-09</p>
<p>External Ground Plane (Optional)</p> <p>The optional external ground plane can be placed above the suspended ceiling to improve gain and VSWR performance of the antenna.</p>	 <p>27-272-09</p>

Mating Connector Torque:

N-Type: 26.6 in-lb (3 Nm)

4.3-10: 44.3 in-lb (5 Nm)