

470MHz ISM Band PCB Antenna

Part Number: PIOV.005.NRA.A

Features and Benefits

- Balanced antenna with independent ground
- Compact 116mm by 15mm size
- 40% antenna efficiency for 470MHz ISM band antenna

Application

- Smart meter
- Industrial applications (Machine to machine (M2M) communication, etc.)
- Smart City (Lighting, Parking, etc.)
- Medical (Telemedicine and telehealth device, etc.)
- Automotive applications



Smart meter

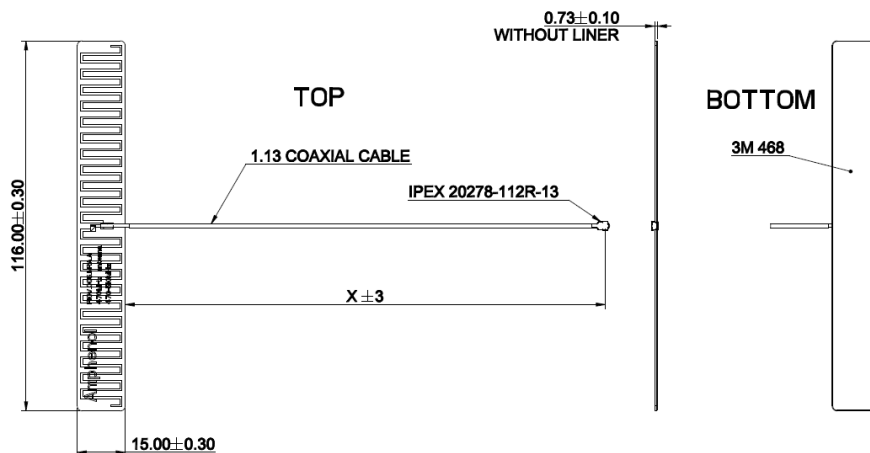


Industrial applications



Smart lighting

Product Drawing



Specifications

band (MHz)	470	510
Return loss (dB)	-2.7	-5.6
Efficiency	20%	55%
Peak gain (dBi)	-4.2	-0.4
VSWR	≤6.6	
Impedance	50 ohms	
Polarization	Linear	
Radiation Pattern	Omni-directional	
Test environment	Antenna in free space	
Power handled	5W	
Dimensions	116*15*0.8mm	
Operation temperature	-40°C ~ +85°C	
Storage temperature	-40°C ~ +85°C	
Weight	2.7 g	
Connector	IPEX MHF	
Cable standard	1.13 coaxial cable, length X (Std.: 150mm)	
RoHS compliant	Yes	
Adhesive	3M 468	

Signal attenuation along cable effect on antenna efficiency

Part Number	Coaxial cable length (mm)	Frequency (MHz)	Peak gain (dBi)	Total efficiency
PIOV.005.NRA.A-050	50	470	-4.1	20%
		510	-0.3	56%
PIOV.005.NRA.A-100	100	470	-4.1	20%
		510	-0.3	56%
PIOV.005.NRA.A-150	150	470	-4.2	20%
		510	-0.4	55%
PIOV.005.NRA.A-200	200	470	-4.3	19%
		510	-0.5	54%