

## 868MHz ISM Band PCB Antenna

Part Number: Piov.008.NRA.A



### Features and Benefits

Balanced antenna with independent ground

Compact 51mm by 15mm size

41% antenna efficiency for 868MHz 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

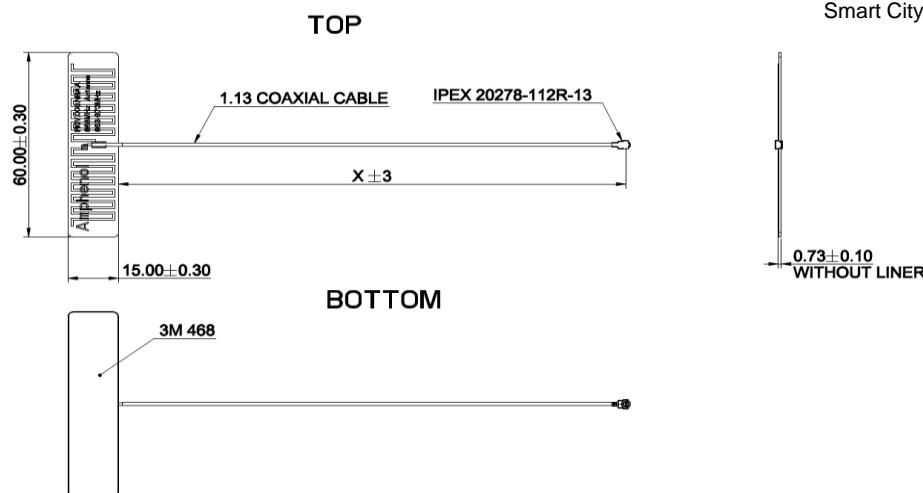


Industrial applications



Smart City

### Product Drawing



## Specifications

Band (MHz)	868	870
Return loss (dB)	-4.5	-4.5
Efficiency	40.9%	42.6%
Peak gain (dBi)	-0.8	-0.6
VSWR	$\leq 3.9$	
Impedance	50 ohms	
Polarization	Linear	
Radiation Pattern	Omni-directional	
Test environment	In free space	
Power handled	5W	
Dimensions	51*15*0.8mm	
Operation temperature	-40°C ~ +85°C	
Storage temperature	-40°C ~ +85°C	
Weight	1.73 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.008.NRA.A-050	50	868	-0.7	42%
		870	-0.5	44%
PIOV.008.NRA.A-100	100	868	-0.7	42%
		870	-0.5	43%
PIOV.008.NRA.A-150	150	868	-0.8	41%
		870	-0.6	43%
PIOV.008.NRA.A-200	200	868	-0.9	40%
		870	-0.7	42%