

450MHz Band Antennas for Smart Metering

Smart metering offers substantial benefits to consumers and suppliers but connectivity is key. Utility meters are often located under stairs, in street-side cabinets and in basements; areas that are not ideal for RF propagation. 450MHz offers enhanced penetration into these areas and longer range to reach remote locations. A high performance antenna can increase the chance of a successful first-fit installations reducing failed connections and expensive engineer call-outs.



Low Profile Bracket Mount UHF Antenna

The LPBU-453-NJ is a UHF antenna in a robust compact housing with a supplied wall/mast mount bracket. Designed to be tough yet cost effective, the antennas are completely enclosed in a moulded housing made from weather and impact resistant plastic. The N jack connector allows for flexible cable selection for long or short cable runs.

Rugged Low Profile Design

UHF Element

Bracket mounted

Part no.	Frequency (MHz)	Termination
LPBU-453-NJ	450-470	N Jack



Low Profile Antenna

The LPW antenna is designed to decrease the lifetime cost of M2M and smart metering installations by offering a robust, effective antenna that is easy to install. The antenna offers omni-directional performance across the 460 MHz band and is fitted with RG178 cable, which can be routed into some enclosures via the door seal without drilling a hole.

Low profile

Adhesive or screw mount

Multiple cable routing options

Part no.	Frequency (MHz)	Cable Length & Termination
LPW-460-2SP	450-470	2m (6.6') SMA Plug
LPW-460-2RFAKDJ	450-470	2m (6.6') R/FAKRA D Jack



Rail Mount Antenna

The Panorama RM450 is designed to allow fitment to DIN EN 50022 rails within equipment cabinets. This compact omni-directional antenna can be mounted in close proximity to the metering communications module reducing cable loss and is easy and quick to install. The antenna and cables are flame retardant meeting the requirements for mounting in device enclosures.

Low Profile

DIN EN50022 rail mount fitting

Part no.	Frequency (MHz)	Cable Length & Termination
RM450-05SP	450-470	0.5m (1.5') SMA Male
RM450-05RFAKDJ	450-470	0.5m (1.5') R/A FAKRA D Jack



Magnetic/Adhesive Mount Antenna

The MD-IN2829 range is a 450-470MHz antenna kit which has a magnetic mount base with a detachable CS23 (RG58) coaxial cable, and is configured for use either on a conductive ground plane or a plastic panel. The base is supplied with two whips one tuned for use on metal panels and the other for use on non-metal panels. The kit includes an adhesive pad for use when the antenna is mounted on a non-ferrous panel. A magnetic/adhesive base offers a high performance antenna solution for smart metering applications which is very easy to install.

Magnetic or adhesive fit

2x UHF whips for metal or non-metal panels

2m (6.6') low loss cable

Part no.	Frequency (MHz)	Cable Length & Termination
MD-IN2829	450-470	2m (6.6') SMA Male

