

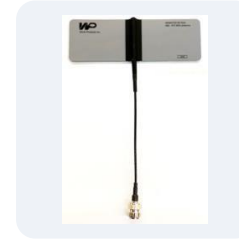


WIRELESS BUSINESS UNIT · AMI METER CONNECTIVITY

Range Extension Kits for AMI Meters

Get the meter back on the network.

Antenna coupler, RF cable and external antenna — a field-installable kit for AMI meters in basements, vaults, garages and metal cabinets.



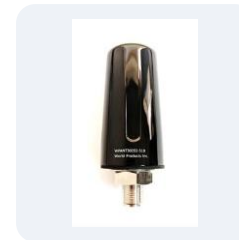
01 Antenna coupler

Adheres to the meter — no cover removal



02 RF cable assembly

LMR200 / LMR400, N-type male both ends



03 External antenna

Mounted where there is signal

— THE PROBLEM

When the meter **can't reach the network.**

Concrete, steel and distance put AMI meters out of RF range. A range extension kit moves the antenna — not the meter — to where the network can hear it.



Basements

Meter rooms below grade



Parking garages

Underground, fully enclosed



Remote locations

Long haul to the nearest collector



Metal cabinets

Enclosures that block RF



Underground vaults

Below street level

THE FIX Couple to the meter's own antenna · route the signal out on coax · radiate from a location with coverage

KIT COMPONENTS

Three components. One reliable link.

Every range extension kit is built from the same three parts, matched to the meter's RF protocol and the distance to the external antenna location.



01 Antenna coupler

Self-adhesive coupler bonds to the meter case and picks up the meter's RF energy. No cover removal, no power disconnect.



02 RF cable assembly

LMR200 or LMR400 coax with N-type male connectors on both ends, in stock lengths from 5 to 100 feet.



03 External antenna

Omni, vandal-resistant, high-performance or directional — mounted outside the obstruction, where coverage exists.

INSTALLS LIVE No meter cover removal · no power disconnect · self-adhesive coupler with 3M double-stick backing

Couples to the meter, **not into it.**



Protocol coverage

Compatible with most AMI smart meters using cellular, LoRa/ISM, Wi-Fi or UHF bands



Live installation

Installs without removing the meter cover or disconnecting power



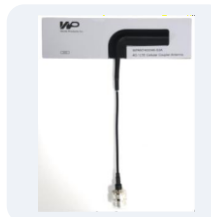
Type-N pigtail

Pigtail cable with Type-N connector feeds the external antenna through an RF cable assembly



Self-adhesive backing

3M double-stick tape for secure, permanent attachment to the meter case



LTE / Cellular

698 – 960 MHz · 1710 – 2700 MHz

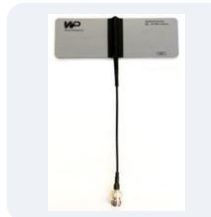
WPANT40046-S3A



LoRa / ISM / Wi-Fi

902 – 928 MHz · 2.4 GHz

WPANT40016-CB



UHF

450 – 470 MHz

WPANT40142-S3A

Attaching the coupler to an electric meter.

01

Prepare the surface

Clean the installation surface by sanding gently, then wipe with an alcohol wipe.

02

Remove the tape backing

Peel the 3M tape backing from the antenna coupler.

03

Position and press

Attach the coupler to the meter at the position directed by World Products Inc.



Antenna coupler mounted to the meter case

NEXT Connect the coupler's Type-N pigtail to the RF cable assembly, then route the cable to the external antenna

EXTERNAL ANTENNAS

Four families, three protocols.

The same four antenna styles cover every AMI protocol — pick the style for the mounting situation, then the part number for the band.



Cabinet / bracket omni

LTE WPANT30202-S1B

LoRa/ISM WPANT30202-S1B

UHF WPANT30176-S1A



Vandal-resistant dome

LTE WPANT30146-S5A

LoRa/ISM WPANT30146-S5A

UHF WPANT30175-S2A



High-performance omni

LTE WPANT30274-R1B

LoRa/ISM WPANT30104-S1C

UHF WPANT30180-S1A



High-gain directional

LTE WPANT30319-R1A

LoRa/ISM WPANT30050-RA

UHF WPANT30160-R1A

Match the antenna to the obstruction.

Four field situations account for nearly every range extension install.



Meters inside metal cabinets

The cabinet is the obstruction — mount the omni on the enclosure itself.

WPANT30202-S1B · WPANT30176-S1A



Areas with vandalism concerns

Low-profile dome with no exposed radiator to grab or snap off.

WPANT30146-S5A · WPANT30175-S2A



Basements, vaults, parking structures

Run the coax up and out — mount the antenna outside the building.

WPANT30274-R1B · WPANT30104-S1C · WPANT30180-S1A



Remote sites with low signal strength

Aim a directional high-gain antenna straight at the collector or tower.

WPANT30319-R1A · WPANT30050-RA · WPANT30160-R1A

— FLUSH MOUNT ANTENNA

Rugged. Walkable. Out of the way.

Flush mount antennas provide excellent coverage in the 902–928 MHz ISM/LoRa band and the 450–470 MHz UHF band. Ideal for high foot-traffic areas where trip hazards must be avoided.

902 – 928 MHz ISM / LoRa

450 – 470 MHz UHF

ADA

Surpasses ADA requirements, chapter 3, section 303

IP68

Water and dust proof

IK10

Vandal resistant

Contact the Wireless Business Unit for the flush mount part list.

World Products, Inc. · worldproducts.com



Installed flush in a walkway · low-profile housing

Everything between the coupler and antenna.

Use LMR200 for runs under 10 feet and LMR400 for runs over 25 feet — both with N-type male connectors on each end.



LMR200 assemblies

WPANT50206-S1A 5 ft
WPANT50206-S2A 10 ft



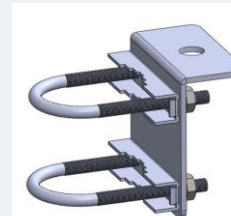
LMR400 assemblies

WPANT50603-S1A 5 ft
WPANT50603-S2A 10 ft
WPANT50603-S3A 25 ft
WPANT50603-S4A 50 ft
WPANT50603-S5A 75 ft
WPANT50603-S6A 100 ft



N-type adapter

WPANT50041-S1A
Female-to-female
Joins different lengths
and cable types



Mounting bracket

WPANT50025-S1B
Stainless steel
For WPANT30202-S1B,
30104-S1C, 30180-S1A,
30176-S1A

Connect, weatherproof, **mount.**



Antenna coupler

On the meter



RF cable assembly

N-type, both ends



External antenna

Outside the obstruction

01

Attach the antenna coupler's Type-N connector to the cable, then cover the connector with coax tape.

02

Connect the other end of the cable to the external antenna and cover that connector with coax tape.

03

Mounting on a metal cabinet requires drilling a hole in the top of the cabinet for the antenna connector.

— RESULT

Installed. Back on the network.

With the range extension kit properly installed, the AMI meter is seamlessly connected to the RF network — reliable data transmission to and from a location that had none.



Meter untouched

No cover removal, no power disconnect, no meter swap



Field installable

Adhesive coupler, pre-terminated coax, standard mounting hardware



Protocol agnostic

Cellular/LTE, LoRa/ISM, Wi-Fi and UHF meters all supported



Where range extension kits go in — meters, cabinets, streetside



We are here **to help.**

Talk to the Wireless Business Unit about kit selection, part numbers and install support.

Bruce Bishop

Director, Wireless Development

831-612-6709 bbishop@worldproducts.com

Daniel Suster

Wireless BU Manager

707-945-8763 dsuster@worldproducts.com