

MODEL: UP-LRG-E / UP-LRG-4G

Industrial LoRa Concentrator Gateway

Collects data from LoRa meters and sensors across the site and backhauls it to your server or to the UtilityPal App. Available in an Ethernet edition and a 4G LTE edition with SIM slot. Industrial fanless build, RS485 and RS232 on board. Supplied on EU868 for South Africa.



KEY FEATURES

Multi-channel Access

Concurrent multi-channel reception with high node capacity.

Long Range

5 - 15 km line of sight to end devices.

Two Backhaul Editions

Ethernet only, or 4G LTE with Ethernet and a SIM slot.

Mainstream Protocols

TCP, UDP, HTTP and MQTT to your server or platform.

Serial On Board

RS485 and RS232 for wired meters at the same point.

Industrial Grade

Fanless, -40°C to +85°C, DC 9-36 V, ≤5 W typical.

BLE 5.0 Setup

Commission and diagnose from a mobile app.

Type-C Port

Local configuration and firmware upgrade.

Remote Management

Remote monitoring, configuration and fault alerting.

TECHNICAL SPECIFICATIONS

LoRa Frequency	EU868 (863-870 MHz) as supplied for South Africa. 433 / 470 / 915 MHz available to order.
LoRa TX Power	Max 22 dBm (adjustable)
RX Sensitivity	-137 dBm @ SF12 / BW125 kHz
Backhaul	Ethernet (UP-LRG-E) 4G LTE + Ethernet with SIM slot (UP-LRG-4G)
4G LTE Bands	Optional, configurable for local carriers
Communication Ports	1 x LAN, 1 x RS485, 1 x RS232 serial 1200 - 115200 bps
Network Protocols	TCP / UDP / HTTP / MQTT
Power	DC 9 - 36 V wide input ≤5 W typical
Configuration	Type-C & BLE 5.0
Antenna Interface	2 x SMA female (LoRa / 4G)
Operating Temperature	-40°C to +85°C, fanless
Dimensions / Weight	120 x 90 x 35 mm excluding antenna approx. 220 g
Installation	Wall-mount / DIN-rail / desktop
Lead Time	8 - 10 days

SYSTEM ARCHITECTURE



One gateway serves many devices. Add the UP-LRR repeater only where a site survey shows devices falling outside gateway range.

ORDERING INFORMATION

UP-LRG-E LoRa Concentrator Gateway, Ethernet backhaul edition, EU868. Frequency customisable.

UP-LRG-4G LoRa Concentrator Gateway, 4G LTE + Ethernet backhaul edition with SIM slot, EU868.

HARDWARE LAYOUT & INTERFACES



Front: LAN, RS485 / RS232, Reset, Type-C, DC 9-36 V

Rear: LoRa antenna, SIM slot, 4G antenna (4G edition)

TYPICAL APPLICATIONS

- Estate, body corporate and commercial sub-metering
- Bulk water and electricity monitoring
- Municipal and utility reticulation networks
- Industrial plant and energy monitoring
- Water reservoirs, pump stations and boreholes
- Agriculture and irrigation telemetry
- Building services and environmental sensing
- Any site feeding the UtilityPal App