Coronis Wavecell™ gateways give you remote access to networks of remote Wavenis-powered end-points to benefit from networks that extend from the field right to your office.

In most real-world metering and telemetry networks, end-points are located many miles away from your office and data processing centers. Whether you need to monitor sensors in industrial environments or meters in quarries, apartment buildings, or any widespread geographical layout, you can use Wavecell to get full access and control from a single location.

Wavecell gateways use Wavenis™ ultra low-power wireless technology to communicate with installed Wavenis-powered monitors, and an integrated cellular modem to send data directly over the cellular telephone network. With Wavecell you can connect remote Wavenis networks to back-end systems and enterprise networks over any distance. Each Wavecell can collect and store information from up to 2000 Wavenis-enabled monitors. Data is then transferred to your server via SMS/GPRS machine-to-machine (M2M) services.

With full two-way communications, Wavecell can also be used for remote management, allowing administrators to query nodes over any distance at any time. Field units even can use the extended network to send various kinds of alerts automatically, ensuring peace of mind for managing even the largest networks.

- End-to-end two-way communications
- Secure Wavenis communication protocol and cellular modem
- A single Wavecell handles groups with up to 2000 Wavenis nodes
- Time and date stamp for data and events
- Programmable automatic alarms (power failure, cable damage, low battery…)
Wavecell Specifications

PRODUCT FEATURES

- Full 2-way communications (back-end to Wavecell; Wavecell to end-nodes)
- Supports up to 2000 WAVENIS nodes with up to 3 repeaters per route
- Battery backup
- Power outage detection and automatic notification with notification by SMS
- Event data log and time stamp
- SMS server date
- Protection index IP66 – EN60529
- Aluminum casing
  - Dimensions: 8.6” x 5.1” x 3.1” (220 x 130 x 80 mm)
  - Total weight: 3.3 lbs (1.5 Kg)
- 230v AC / 110v AC, with 6’ cable (2 m)
- 12v input for solar panel connection (optional)
- Operating temperature -4° to 131° F (–20° to +55° C)
- Operating software on PC/Windows with client-server architecture
- Management of several concentrators from one server and flexible operating modes
- Top-mounted single antenna
- Remote external antenna (optional) with cable

LINK CHARACTERISTICS

- U.S. 902-928 MHz, European 868-870 MHz bands using FHSS
- Wavenis radio range up to 3280 ft (1000 m) L.O.S with 25mW path and 4000m with 500mW path.
- Radiated power: 25mW (+14dBm) & 500mW (+27dBm)
- Frame error rate 0.1% @ -110dBm sensitivity
- Compatible with all Wavenis products
- Compatible with Wavetalk 25mW-25mW and Wavetalk long range 25mW-500mW range extenders
- EMC certification (EN300-683)
- ETSI certification (EN300-220-1)

CELLULAR NETWORK FEATURES

- Dual-band 900/1800MHz GSM/DCS
- Tri-band 900/1800/1900MHz (optional)
- Data transfer by SMS (SMS-only subscription possible)
- Ready-to-use (SIM card not included)

NETWORK FEATURES

- Supported routing: point-to-point & repeater
- Wireless on-site configuration via tablet PC (with Wavenis module)
- Database synchronization and integrity checking with servers
- Equipment identification using local ID
- Handles up to 255 simultaneous requests from remote server(s)
- Secure remote management from up to 8 workstations