



## Waveflow™

### 100 mW Wireless Smart Meter Transceiver and Data Logger

Waveflow is an advanced battery-powered wireless transceiver and data logger for demanding smart metering applications. Deployed in networks covering millions of homes and commercial locations around the world, this flexible ready-for-branding or OEM platform can be integrated into new gas, water and electric meter designs or connected with existing meters as an after-market add-on.

Waveflow provides fast remote access to all relevant meter information, allowing utilities to speed up data collection and billing cycles and to offer new value-added services to customers. Waveflow integrates Wavenis® wireless technology for large-scale automated metering networks as well as walk-by solutions.

- Logs meter index and events
- Transmits data automatically or on-demand
- Issues alerts for leaks, tampering, backflow, low battery



### OEM platform for smart meters

Waveflow can be customized to meet your specific application and design requirements. A flexible OEM platform, this solution is available either as a finished ready-to-brand product in IP68 casing, or as wireless board that can be integrated directly into your new products.

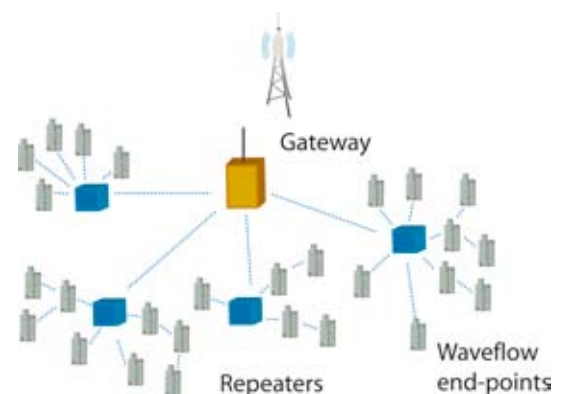
- Wireless OEM card or ready-to-use module in IP68 casing
- Supports up to 4 meters

### Industry-leading wireless performance

In metering networks, strong last-mile wireless coverage and long battery life in the field are among the most important factors for success and low-cost of ownership over time.

Waveflow is based on Wavenis wireless technology, a highly optimized ultra-low-power and long-range solution specifically designed to handle communications in harsh, complex and often unpredictable scenarios. With its unique approach to wireless networking, Wavenis delivers the extreme long range and battery life required for cost-effective, easy-to-deploy and worry-free smart metering networks.

- Battery life generally over 10 years<sup>(1)</sup>, even in highly dense networks
- Range up to 3 km/1.9 mi (100 mW/868 MHz)
- Enhanced power saving technology
- Easy configuration in the field
- Based on Wavenis wireless technology



*Waveflow end-points collect and transmit data from remote sensors such as utility meters*

## Waveflow

### Full-featured wireless sensor monitor

- Designed for walk-by and fixed network monitoring: compatible with Wavewalk software for walk-by solutions and Wavenet Manager for fixed network remote reading.
- Available potted in plastic casing with external cable connection to compatible meters, or as OEM board for under-glass integration (includes antenna)
- Inputs for up to 4 pulse meters or 2 encoder meters
- Programmable data logging: stores 24 reads standard; extended capacity over 2,000 reads per input
- Sample battery life: up to 10 years with 3.6V 13A.h battery (based on one reading per day)

### Wavenis wireless connectivity

- Designed for large-scale metering networks
- Transfers data wirelessly to and from remote locations
- 2-way communications for scheduled transmission, spontaneous alerts and on-demand reading
- Robust against physical and electronic interference
- Integrated range extender feature in every device: link up to 4 modules (maximum 3 wireless hops from gateway via repeaters to end-point)
- Highly optimized for long battery life in the field
- Easy network integration with Wavetalk range extenders and Wavegate Ethernet/GPRS gateways using Wavewalk software (optional) on Wavenis-enabled PDA or Bluetooth PDA + Coronis Beltbox
- Supports Wavenis wireless technology

### Fully integrated metering profile



- Alerts and programmable thresholds for leaks, back-flow, tampering and remaining battery capacity, RSSI

### Product information

- Wavenis® 868 MHz
- Range (line of sight): up to 3 km/1.9 mi with 100 mW (868 MHz)
- ETS 300-220 compliant for 868 MHz modules, -20°C to +70°C (-4° to 158° F)
- Fully sealed IP68 casing: 12.2 x 5.6 x 2.5 cm (4.8 x 2.2 x 1 in), 160 g (5.6 oz)
- Wireless OEM board: 6.5 x 3.8 x 1.9 cm (2.6 x 1.4 x 0.74 in); 34 g (1.2 oz)
- 868MHz (100 mW) with 3.6V 13A.h battery

### Related Coronis products

- Wavetalk
- Wavegate GPRS/Ethernet gateway
- Coronis Bluetooth Beltbox
- Wavewalk monitoring/configuration software
- Wavenet Manager monitoring and configuration

Waveflow – Available configurations						
Product	Bare board 			Potted 		
MHz	433	868	915	433	868	915
IP68					x	
Power						
10 mW						
25 mW						
100 mW		x			x	
Max inputs <sup>(2)</sup>		2 or 4			2 or 4	
Cable or probe <sup>(3)</sup>					x	

<sup>(1)</sup> Depending on environment and connection frequency

<sup>(2)</sup> 4 inputs with pulse meters; 2 inputs with encoder meters

<sup>(3)</sup> Probe provided by client