FREEWAVE

WaveContact Series

WC30i-TZ Wireless Totalizer

Rugged, Simple, Flexible

FreeWave's WC30i-TZ Wireless Totalizer delivers an intrinsically safe totalizer solution for industry-standard turbine meters. It is easily and quickly installed and deployed at a low price point.

The WC30i-TZ Wireless Totalizer connects to industry-standard turbine meters and wirelessly connects to the WC45i Gateway. It features a settable contract hour with a Real Time Clock (RTC) and battery backup. The LED display shows flow rate and totalized readings.

Together with the WC45i Gateway, the WaveContact system is easily and quickly deployed to implement industrial automation where wired installations would be cost prohibitive. The WaveContact System has been designed for deployment in Class I, Division 1 locations.

Key Features

- Compatible with standard turbine meter inductive pickups
- Local display with flow rate, totalizer, and diagnostics
- Provides grand total, yesterday's total, and today's total to individual Modbus registers
- 30-day built-in local data historian / backup storage
- Wireless data interface to standard WC45i-Gateway via robust 900 MHz protocol
- Configurable contract hour with real-time clock and battery backup
- Configurable K factor
- Up to 10-year battery life
- Up to 0.8 km (0.5 miles) range
- Weathertight rugged enclosure for outdoor operation
- Easy to install and maintain
- Class I, Division 1, intrinsically safe

Designed, Manufactured, and Tested in Boulder, CO

Made in USA

Transmitter

Frequency Range	902 to 928 MHz, FHSS, Compliant with FCC Part 15
Range	Up to 0.8 km (0.5 miles) with clear line of sight
Over-the-Air Rate	10 kbps

Turbine Meter Input

Input Type	Magnetic pickup
Pickup Connector	Standard 2-pin Circular Connector
Minimum Voltage Input	20 mV peak-to-peak (low gain) 5 mV peak-to-peak (high gain)
Input Frequency	1 kHz to 4 kHz (low gain) 1 kHz to 2 kHz (high gain)

Interfaces

Data Interface	Wireless, data and diagnostics available as Modbus registers at the Gateway
Display	32-character LCD Power-on button activation Displays flow totals, flow rate, and status information
Internal Diagnostics	Battery voltage, signal strength, error conditions

Additional Features

Internal Diagnostics	Battery voltage, signal strength, error conditions
Security	AES 128-bit encryption
Clock	Real-time clock with battery backup

Power Requirements

Battery Pack	1 X D Internal lithium battery pack, field replaceable; C1D1 certified when used with FreeWave system; in situ replacement allowed
Battery Life	Up to 10 years depending on selected check-in interval 7.5 years at a 5-minute interval
Radio Power	40 mW

General Information

Operating Temperature	-40°C to +60°C (-40°F to +140°F)
LCD Display Temperature	-20°C to +70°C (-4°F to +15840°F)
Humidity	0 to 100%, non-condensing
Enclosure	High Strength Polycarbonate
Dimensions	226 L x 112 W x 92 H (mm) 8.9 L x 4.4 W x 3.6 H (in)
Mounting Connection	316SS, 1" female NPT swivel union connector for direct mount to turbine meter
Electrical Connection	2-pin Circular MIL Spec connector
Safety	Intrinsically Safe Class I, Division 1, Temp Code T3, Groups C&D. Conforms to UL Std. 913, Certified to Can/CSA Std C22.2 No. 157

Information to Order

Model Number	Description
WC30i-TZ	Wireless Flow Totalizer

As of Jan-2019. Specifications are subject to change without notice. LDS0023AA