FlowConnect™

FlowConnect™ FC500 and FC501 System for Mc Propeller™ and Water Specialties™ Flow Meters

Features & Benefits

- ExactRead™ technology for exact match from meter to website
- Affordable and reliable remote meter reading with streamlined design
- More frequent data for timely water management decisions
- Pre-assembled on new meters for simplified installation
- Retrofits on existing meters in less than 30 minutes

Applications

- Billing and accounting
- Conservation
- Regulation and allocations
- Planning and development
- Operations and metering

Compatibility

- Mc Propeller - Mechanical and Digital Registers
- Water Specialties Propeller - Digital Register ONLY

Your trusted partner for water meters now offers an innovative built-in remote meter reading option, FlowConnect.

McCrometer's latest development in flow metering technology provides districts, growers, and irrigators with a new solution to meter data collection.

This built-in telemetry system for McCrometer Flowmeters is designed to provide easy access to meter data without requiring additional hardware.

FlowConnect can be added to any new or existing McPropeller or Water Specialties Propeller flowmeter.

Technical and Performance Specifications

Communication

	Cellular	Satellite
Network Type		
Protocols	GSM/GPRS	Iridium
Operating Frequency (MHz)	824–849 869–894 1850–1910 1930–1990 1710–1755	1616-1626.5
Antenna	External Bulkhead Extension TNC Antenna 800/1800/1900 MHz	External Bulkhead Extension TNC Antenna 1,600 Mhz

Power

Batteries	Batteries can be replaced by user on-site **Battery Only:** 2 Primary D-Cells 3.6V 13Ah **Rechargeable:** 1 Primary D-Cell 3.6V and 3 Secondary C-Cells, 1.2V in series
External Power	Requires Rechargeable Battery Configuration listed above. Recommended 9-12 VDC, 0-1000mA Max: 14.5 VDC (Power supply or solar panel)
Recommended Battery Replacement Interval	**Battery Only:** 3 years (Daily Report Interval) **Rechargeable:** 4 years

McCROMETER

Environmental

Operating Temperature	- 30°C to 70°C (-22°F to 158°F)
Electrical / Mechanical Protection	All electrical components are grounded to fluid column and pipe. Manufactured in accordance with IP-67 Standards and ESD-safe
Environmental Protection	Ingress Protection (Dust Tight / Water Tight) to IP67 Vibration proof while operating: Validated Vibration and 20G Sinusoidal testing to JEDEC 22B103B Section 4.3, Table 3, Service Condition C, for all axis and 20G sin sweep 20 - 2,000Hz for all axis.
Tamper Protection	Factory installed tamper-evident wire lock system

Other Characteristics

Mounting	Top Plate compatible with any McCrometer Propeller or Water Specialties (Digital Register Only)
External Interface	Five-pin serial-USB cable
Flow Indicator	Digital Register or McPropeller Mechanical Register
Operating Temperature	- 30°C to 70°C (-22°F to 158°F)
Inputs	Two analog sensors, 1 pulse accumulator (for rain gauge)
Outputs	**Mechanical Register:** None **Digital Register:** 4-20 mA, Open Collector Pulse, Dry Contact Pulse, Optically Isolated Pulse (via 5- pin output cable)
Data Collection Method	**Digital Register:** Serial interface between FlowConnect and digital register allows FlowConnect to read totalizer and rate value directly. No pulse counting required and always a perfect match. **Mechanical Register (McPropeller only):** Pulse counter and high-low digital signal for forward-reverse pulses. Accuracy between meter and Web totalizer: ±0.25%
Data Storage	Capable of storing up to 1,000 reports in local memory

Accessories

Serial Accessories	200.720.542 serial-USB cable
Power Accessories	**Rechargeable:** 200.723.520 2.5W 220mA Solar Panel 200.733.522 5W 540 mA Solar Panel 200.720.523 115V Power Supply **Battery Only:** No Power Accessories
Sensor Accessories	Adcon PA1 Cables - Pressure 10bar 500.000.120 - 16 ft. Cable 500.000.119 - 32 ft. Cable 200.733.048 - RGI Rain Gauge 200 200.720.510 - Y Cable 200.733.902 - A902 1/2/3 Cable

Communication Accessories	Cellular	Satellite
	900.000.590 TNC Rigid Antenna (Included) 900.000.565 Directional Antenna 900.000.567 Extension Antenna	TOB039 Helical Antenna (Included) MCC-510-AI-A Extension Antenna, Magnet Mount

Dimensions

Network Type	Cellular	Satellite
Unit Enclosure Size	W x D x H	W x D x H
Non-Rechargeable	6.5" x 5.6" x 9.9"	6.5" x 5.6" x 9.8"
Rechargeable	6.5" x 6.1" x 9.9"	6.5" x 6.1" x 9.8"
Packaged Dimensions	11" x 11" x 11"	11" x 11" x 11"
Packaged Weight	6 lbs.	6 lbs.