

Compu-Flow™

Smart-Mag

Magnetic Single Point Insertion Flow Meter

The Compu-Flow™ Smart-Mag Single Point Insertion Flow Meter is engineered with industry-leading features and smart technology to deliver uncompromised flow measurement solutions for today's demanding industries.



Compu-Flow™ introduces the technologically advanced industrial-grade magnetic single point insertion flow meter for superior flow measurement: The Compu-Flow™ Smart-Mag. The revolutionary new and enhanced hardware and software design results in a low-profile, high performance flow meter that delivers precise flow readings due to its advanced proprietary microprocessing technology. Compu-Flow™ introduces the first in its class Smart-LED indicators to immediately know what your flow is doing at-a-glance. Stainless-steel probe with stainless-steel electrodes are mounted in teflon for extended service life. Upper housing and all hardware is either PVC or stainless-steel.

The Compu-Flow™ Smart-Mag produces a rapidly reversing magnetic field in the probe, and as the fluid moves through this field a voltage is generated. This voltage is measured and translated into a frequency signal that is proportional to flow rate. This digital signal can be sent directly to a PLC or other control or can be converted using any of the Compu-Flow™ indicators or receivers. Signal cable is standard 25', optional to 2000'.

The complete lack of moving parts in the Compu-Flow™ Smart-Mag flow sensor is the source of its reliability. There is no rotor to stop turning in dirty water and there are no bearings to wear out. Stainless hardware probes withstand a variety of temperature, pressure, and chemical conditions. Reverse flow-output and submersible models are optional. The Smart-Mag is a stand-alone flow sensor.

The Compu-Flow™ Smart-Mag is truly Flow Smart.

Features

- **Quick & Easy Installation:** Installation time from start to finish is typically 30 minutes.
- **User-Friendly:** Engineered with an extremely easy to use interface. No math or formulas required.
- **High-performance:** Out-performs competition in accuracy and reliability. NIST Certified to < 0.5%.
- **Zero Corrosion Factor:** All exposed components are PVC, Stainless-Steel, or Polycarbonate.
- **Compu-Flow™ Smart-Flow Technology:** Proprietary technology delivers best-in-class flow readings.
- **Compu-Flow™ Smart-LED Indicators:** Immediately know what your flow is doing at-a-glance.
- **Lightweight & Low Profile:** The Compu-Flow™ Smart-Mag is the first in its class to provide a revolutionary lightweight low profile hardware design. The future of magnetic flow meters is here. Custom probe lengths optional.
- **Multi-industry flow measurement solution:** Engineered to measure virtually all conductive water based flows.
- **Rapid Response Time:** Instant accurate flow readings. Selectable update times.

Package Includes:

Fixed:

- NEMA 4X Display IP65
- Transducer & 25' Cable IP68
- Power Supply
- Sensor Coupling Hardware
- Quick Start Guide
- USB Flash Drive / User Manual

Portable:

- All of the above plus:
- 12V 1.0AH AGM Battery
- 90/240 VAC/12VDC @ 1.0A Smart Charger
- Auxiliary Handle
- Field Transport Case
- Quick Connect Flow Sensor Port

Specifications:

Display:

NEMA – 4X hinged IP65
Temp: (+4°F to +140°F)

Dimensions:

7 x 5 x 3 inches

Totalizer:

12 Digit LCD
Memory Backup 99 yrs +

Rate Meter:

4 Digit LCD Digital Bar Graph

Memory:

Nonvolatile 99 yrs +
All parameter inputs

Power:

Isolated-Regulated-Module
100-240 VAC / 12VDC @ 1.0A

LED Indicators: (Receiver)

Green – Power, Yellow – Echo,
Red – Hi/Low Alarm

Outputs:

Digital Pulse Train (0-12V)
4-20mA (MAX \geq 1200 ohm)
RS232 via DB9 Port
Hi-Low Limit Alarms * Batch Control *
* (12VDC @50mA)



Transducer:

Stainless-steel 1" probe

Power: 12/24VDC @ 120mA
Submersible 200' Max IP68
Potted IP68 Non- Metallic
Temp (+4°F to +220°F)
Digital Pulse Train (0-12V)
Analog Signal 12VDC
K Factor - 100Hz/FPS

Smart-LED Indicators:

(Transducer)

Green: PWR: Full Pipe, No Flow
Green: Flash: Forward Flow Present
Yellow: Reverse Flow Present
Red: Low or no water present

Cable Length:

25 ft. standard
0 to 2000 ft. (optional)

Flow Range:

FPS: 0-30 fps/ 10 mps
Resolution .1 fps, 0.03 mps

Pipe ID Range:

0 – 99.99 inches
0 – 2540 mm

Accuracy:

+/- 1% (function of flow profile)
+/- 0.5% with proper piperun

Linearity:

+/- 0.5%

Repeatability:

+/- 0.1%

Options:

Wireless Signal 900 MHz
Data Logger 1- 32 GB
Flash Drive Internal or Remote
Probe lengths: 6", 12", 18", 24", 36"
Custom probe lengths available

Weight:

4 lbs. - Fixed System
8 lbs. - Portable System

Engineering Units:

English & Metric

Languages:

• English

Part Number:

CEM-100S

Warranty:

2-Year Limited Warranty

