The HIT-4U is a battery or loop-powered flow rate and total indicator, with data logger and Modbus Communications Protocol. The HIT-4U is configurable from the instrument front panel keypad or via Modbus communications.

**Outstanding Features**
- LCD display for Total and Rate
- Non-resettable Grand Total
- Full front panel operation with magnetic pointer through enclosure
- Up to 20-point Linearization to correct for flowmeter non-linearity
- 4-20 mA analog output proportional to flow rate
- Optional Scaled Pulse or Raw Pulse Output representing an incremental total volume
- Alarm Output with dual set point configurable for Rate or Total
- Magnetically operated switch for Total reset
- Internal battery backup
- Configuration and Totals stored in non-volatile memory. Totals saved when pressing ▲ button.
- Data Logging: Hourly Total, Daily Total, Event Logs
- Modbus Communications Protocol via RS485
- Real Time Clock

**Specifications**

**Display:**
- LCD, updated every 1 second

**Total:**
- 8 digits 3/8” high. Resettable using a magnet, a contact closure, front panel keypad or via Modbus communications.

**Total Units:**
- GAL, LIT, FT3, ACF, ACFx1000, M3, BBL, KG, LB, NM3, SCF, SCFx1000

**Grand Total:**
- 8 digits 3/8” high, non-resettable. Grand Total is displayed for 7 seconds after pressing the ▲ button.

**Rate:**
- 6 digits 1/2” high

**Rate Units:**
- /SEC/MIN/HR/DAY

**Linearization:**
- 2-20 points

**K-factor:**
- The pulses per unit of Total (e.g. pulses/gallon) are configurable in the range 0.001 to 9,999,999

**Decimal Points:**
- Decimal point positions are configurable for 0, 0.0, 0.00, or 0.000 for rate, total and K-factor.

**Accuracy:**
- Total and Rate: +/-0.01% of reading, +/-1 count

**Magnetic Pickup Input:**
- Frequency Range: 0.2 Hz to 5000 Hz
- Signal Level: 30mVp-p to 30 Vp-p

**MCP Pickup Input:**
- Opto-Isolated
- Frequency Range: 0 Hz to 3000 Hz
- Internal pull-up 10KΩ to +DC
- Signal Level: 0 to +DC
- Low (Logic 0): <1 VDC
- Min Pulse width: 0.1 msec

**Contact Closure Input:**
- Frequency Range: 0 Hz to 5000 Hz
- Internal Pull-up: 220 kΩ to +3.3 VDC
- External Magnet: Activates internal switch

**Analog Output:**
- Type: 4-20 mA follows rate
- Accuracy: 0.02% Full Scale @ 20°C
- Temperature Drift: 40 ppm/°C
- Update Time: 0.125 seconds

**Pulse Output:**
- Type: 0-5V TTL, Open Collector (30 VDC, 100 mA max)
- Divider: 0.01, 0.1, 1, 10, 100
- Pulse Width: Adjustable 4ms to 300ms
- Max Frequency: 100 Hz

**Nema 4X Enclosure Style**
- Shown with external USB

**Aluminum Casting Powder Coated Enclosure Style**
- Shown with external USB
**Alarm Out with Dual Set Point:**
Type: 0-5V TTL, Open Collector (30 VDC, 100 mA)
Function: Rate or Total

**DC Power/Loop Powered:**
Voltage: 8 to 30 VDC
Current: <24 mA
Loop Burden: 8 VDC
Supply Backup: C-size 3.6V Lithium battery or battery pack for Ex d certified system.
Protection: Reverse polarity, overvoltage

**AC Power Input Universal:**
Voltage: 100-240VAC @ 0.15A 50/60 Hz

**Battery Powered:**
Two (2) C-size 3.6V Lithium batteries
Battery Life: 2 years typical
Ex system - battery pack (4xAA)
Battery life 1 year typical

**Serial Port RS485:**
Protocol: Modbus RTU
Function: Data Logging, Configuration, Process Monitor

**Physical:**
Op. Temperature:
-40°F(-40°C) to 176°F (80°C)
Humidity: 0-90% Non-Condensing
Enclosure: NEMA, Aluminum
(Approx. 5"x5"x5", 3 Lbs.)

**Data Logging**
Hourly Total Log: 768
Daily Total Log: 378
Event Log: 345

**Accessing Logs:**
Via Modbus communication
Up to 100 latest flow logs are viewable on the front panel

**Hit-4U Ordering Information**

<table>
<thead>
<tr>
<th>HIT-4U- A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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<td>(CE) CE mark required for Europe (pending)</td>
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**H. Communication Port**
(T) Internal terminal block
(U) External USB for Nema 4X
(X) None

**G. Mounting**
(X) Remote Mounting
(FX) Style 3 or 7 enclosure mounted on turbine
(FXHT) Style 3 or 7 enclosure w/8" long riser mounted on turbine
(FH) NEMA 4X w/8" long riser mounted on turbine
(NP) NEMA 4X enclosure pipe mounting kit 2" pipe & smaller

**Certified Mounting Options Available for Style 3 and 7 Enclosures:**
(MX) Meter mounted. Process temp -40°C to +78°C.
(MA) Meter Mounted w/ ATEX riser. Process temp -40°C to +78°C.
(RX) Remote mounted. Includes E2 junction box and 1"x3/4" SS adapter.
(RA) Remote mounted w/ ATEX riser. Includes E2 junction box.

**Union Options:**
(_U1) 1" Ex-proof union for MX or RX
(_U2) 3/4" Ex-proof union for MA or RA

**F. Compensation Method**
(X) No compensation

**E. Alarm**
(5) 0-5V TTL/CMOS
(OC) Open Collector
Note: Not available with (B) or (L) power inputs

**D. Pulse Output**
(5) 0-5V TTL/CMOS
(OC) Open Collector
Note: Not available with (B) or (L) power inputs

**C. Pulse Input**
(M) Magnetic Coil
(R) Isolated pulse, RP, Hall
(RF) Modulated Carrier Coil

**B. Input Power**
(B) Battery Powered
Note: Mag only, no analog, pulse, or alarm
(L) 4-20 MA Loop Power
Note: Mag only, no pulse or alarm
(D) 12 to 30 VDC External Power
Note: 4-20mA analog out included

**A. Enclosure Style**
(2) NEMA 4X
(3*) Aluminum casting powder coated enclosure (IP66)
(7*) Stainless steel enclosure (IP66)
(F) Panel mount (IP40)
(PD) Panel mount w/clear door and lock (IP40)
(PF) Panel mount w/clear flexible PVC cover (IP65 front only)

*Options for 3 and 7
(M) M20 thread
(S) Sunshade

**Specifications Contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.**

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The quality system covering the design, manufacture and testing of our products is certified to International Standard ISO 9001.