



**MERCURY INSTRUMENTS**  
SERVING THE GAS INDUSTRY WORLDWIDE

## NEW WIRELESS AMR SOLUTIONS

### The IMU-DC

As a result of continuing deregulation and increased competition in the telecommunications industry, particularly the wireless segment, carriers are offering superior data transmission capabilities at compelling prices. In many cases, wireless communication costs are now lower than those for conventional voice grade telephone landlines.

In order to allow our customers to take advantage of low cost digital cellular service, Mercury has developed the IMU-DC. The IMU-DC is a two channel data logger with a built in wireless communications transceiver. Collected data is transmitted over any commercially operated and supported GSM, CDMA or iDEN cellular network using either General Packet Radio Service (GPRS), 1XRTT or iDEN wireless IP networks to Metretek's DC2000 host computer management system.

#### IMU-DC Features and Benefits include:

- ◆ Wireless two-channel pulse collector with integral digital cell phone
- ◆ Operates on GSM, CDMA iDEN networks.
- ◆ Supports high-speed data transfer using GPRS, 1XRTT or iDEN service providers.
- ◆ Choice of cell phone service providers insures lowest operating cost.
- ◆ AC, solar or stand-alone battery-powered options
- ◆ Provides portability & overall lower installation costs
- ◆ Provides electrical isolation from network
- ◆ Lower equipment and communication costs



#### Applications Include:

- ◆ Replacement of installed analog cellular based data logging devices (analog service is obsolete in many regions)
- ◆ Telecom cost reduction initiatives or cost prohibitive wire line installations
- ◆ Troublesome or cost prohibitive wire line installations.

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# The IMU-DC

## Specifications:

(subject to change without notice)

### Input Channels:

Two each Form A pulse: Can be used for Interval Data or Alarm (Supported with Metretek's DC2000 Software system).

One each Tamper Detect

One each Call Switch

### Pulse Interval Data Storage

Interval records per channel: 7500

Record time Interval selection: 1,3,4,5,15,30,60 minutes

Pulse data rate: 600 per minute max.

Pulse width minimum: 40 milliseconds

### Cellular Network Communications:

Supports AT&T Mobility and Tmobile cellular networks

Verizon, Alltel & US Cellular CDMA networks

Nextel and Motorola Harmony networks

### Power Options:

*Battery Model:* Secondary 6Vdc gel-cell for cellular power. Primary 6Vdc lantern dry cell w/charger for long-term capacity of approximately 24 months, depending on use (phone home operation only).

*AC Mains Model:* Requires 7-8Vac @1 amp source. Regulator-charger and 6vdc secondary back-up battery will provide approximately 5 days backup. AC Mains to low voltage adapter optionally available.

Solar Model: consult with factory to determine size and ratings of solar panel and batteries.

### Physical:

Battery and AC Models

Enclosure: Lexan rated NEMA-4X (IP54)

Exterior dimensions: Approximately 11(28) x 6(15) x 9(23) inches (cm).

Weight: Approximately 10lbs. (4.5Kg)

**Connections:** One each, bottom mounted cable glands pass input and low voltage AC wiring as required. Screw type terminal strips for internal connections.

### Environmental:

Operating Temp Range: -30 to +55 C

Operating Humidity to 90% non-condensing

### Certifications:

- Fully type approved, GSM Phase 2+ compliant.
- FCC part 15 (class B) and part 24
- CE mark
- UL listed AC Mains adapter

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