4000 Series Sensor Transmitting Unit (STU)

Pressure Monitoring for Gas Utilities

Rely on Aclara's two-way, serially connected gas pressure monitoring solution to provide timely, accurate data to help make informed decisions that keep customers safe.

Full, two-way communications capability and intelligent features such as a trend mode make Aclara's gas pressure-monitoring solution the industry's performance gold standard. Aclara's fixed- network approach eliminates recurring expenses and unreliability associated with alternative gas pressure monitoring solutions.

The solution is easy to install on Aclara networks, with plug and play capabilities enhanced by simple over-the-air configuration updates. What's more, reliability and insight into the distribution network makes Aclara's pressure monitoring solution a practical stand-alone answer for utilities regardless of how they read their meters today. With its latest smart infrastructure solution, Aclara gives utilities the confidence of making good decisions based on current data from specific pressure monitors conditions or unauthorized programming.

FEATURES AND BENEFITS

- Provides unique trend mode for live pressure reads in response to alarms
- Supports local firmware updates to the transmitter
- Delivers two years of operation with field-replaceable battery
- Offers optional instrument connection to DC power source or solar-charged battery
- Transmits up to 10 audit trail-data elements hourly
- Reports alarms from the transmitter to the system within one minute
- Offers two-way communication over 450 to 470 MHz FCC-licensed frequencies
- Supports over-the-air instrument reconfiguration with confirmation
- Delivers system-wide time synchronization and encryption for security

TREND MODE (Patent# 10,935,188)

When an alarm from the pressure monitor is sensed, the associated transmission unit automatically switches to trend mode, sending live pressure reads to the utility every six minutes. When troubleshooting a fault, the utility also can remotely initiate trend mode on nearby transmission units for triangulation during alarm situations. The utility resets transmission units remotely once a problem is resolved.

TRANSMISSION UNIT SPECIFICATIONS

Input voltage (Optional)	10-15 VDC at< 1 A
Network type	Two-way
Transmit frequency	450 to 470 MHz
Antenna	Internal
RF power	29 dBm
Read/transmit interval	Hourly
Transmitters response to alarm	≤ 1 minute
Reconfiguration response	≤ 5 minutes
System notification to operator	≤ 5 minutes
On-demand response	≤ 5 minutes
Wire length	12 ft with protective, flexible conduit
Battery	Field replaceable 3.6 V, D-size
MTU service life	20 years
Instrument interface	TIA/RS-232 Serial, Mercury Serial Protocol
Dimensions	9.80” H X 8.26” W X 4.00” D
Weight	2.5 lbs
Operating temperature	-40°C to 60°C
Operating humidity	5% to 95%, non-condensing
Security	AES128, SHA-256 data encryption
Compliance	FCC part 90
	FCC Part 15.247
	CSA Class I, Div. 2, Group A B C & D
	IP67 rated
Software	AclaraONE®
DCU mainboard FW	v 02.66 (or later)
DCU T board FW	v 1.03 (or later)
Aclara RF programmer software	v2.1.9 (or later)

A proud member of the Hubbell family.

Aclara.com | 800-297-2728 | info@aclara.com
Follow us on Twitter @AclaraSolutions

ACL-ACLU-ACLARA-4000-SF-EN-2023-01255 09/2023