

MICRO-ZAMR

Advanced Remote AMR/AMI Unit for Diaphragm Type Meters

KEY FEATURES

- Suitable for diaphragm type meters, compact, protected design
- Plugs onto existing meters in the field. G4/G6/G10/G16/G25 sizes
- Triple sensors for pulse verification and tamper detection
- No missing pulses. Detects flow direction
- Provides information for identifying meter sizing issues
- Helps identify high peak value issues within network
- Cuts meter reading costs. Uninterrupted real time information
- Hourly, daily, monthly archive, min/max/average data
- Flexible, user-configurable data logging feature
- Alarm and event logging
- Built-in optical communication interface
- Integrates to external RFLO smart valve via short range RF option
- Nano power consumption. 10 years typical battery life
- RTC with synchronization and daylight saving support
- Up to 4 simultaneous TCP connections via GPRS/SMS interface
- Configurable cryout function via GPRS or SMS
- Remote monitoring, configuration, diagnostics
- Remote firmware update
- Maintenance free, protected design. No exposed cables or tubes
- Cover tamper detection
- Easy to use configuration and programming software
- Software compliant to Welmec 7.2

MICRO-ZAMR is an advanced, compact remote meter monitoring unit specially designed to meet the emerging requirements of gas distribution utilities.

MICRO-ZAMR incorporates wide range of features which not only meets the basic monitoring requirements, but also provides a complete solution for gas distribution utilities to achieve fast, efficient and cost effective network operation and management.

Identify Meter Sizing Issues

MICRO-ZAMR monitors flow on real time basis, compiles and archives consumption information. This information is later used by distribution management systems to determine oversized and undersized meters to enable distribution utilities to undergo efficient meter replacement campaigns.

Identify High Peak Values in Network

Identify the point of time, duration and frequency at which the hourly consumption volume spike/peak occurs and also the value of these peaks, based on threshold values.

Real Time Information Flow

MICRO-ZAMR collects real time information from gas meter, stores the information, and reports it to distribution management center(s) at user configured intervals.

Alarms and tampering events are reported as they occur without waiting time of report.

Large archiving capacity enables storage of 6 months of hourly, 6 months of daily and 5 years of monthly information.

Extensive Remote Communication Features

MICRO-ZAMR offers comprehensive features for modern, Internet based remote access via GPRS networks. All configuration, reporting, monitoring and diagnostics facilities are also available remotely via designated communication channels, to form a modern supervisory distribution management system which requires very low number of visits to remote stations and fewer personnel for network operations and maintenance.

MICRO-ZAMR supports multiple, simultaneous TCP connections. This means number of host systems in different locations may access a remote instrument without influencing each other. This allows

Continuous Meter Reading for Analysis

Meter readings on periodical basis. This use case acts as the base to seamlessly collect the meter data on top of which utility to perform network analysis.



concurrent operation of multiple remote monitoring systems in different nature, such as utility SCADA systems, distribution management systems, and other legal monitoring systems belonging to upper level government organizations.

MICRO-ZAMR can be configured to establish automatic and simultaneous connections with number of remote locations for periodic reporting and information exchange. It can transfer complete measured, calculated and archived data sets accumulated between reporting periods, and execute tasks scheduled and associated by system administrators or other utility personnel.

MICRO-ZAMR can integrate with external RFLO smart valves via its pluggable short range RF option interface. In this case MICRO-ZAMR acts as master and works with external valve as a set. Wireless integration eliminates exposed cables between MICRO-ZAMR and external valve.

MICRO-ZAMR

Advanced Remote AMR/AMI Unit for Diaphragm Type Meters

BASIC SPECIFICATIONS

	• •
POWER	
Battery	3.6V certified battery, 10 years min. under the specified
	operating conditions
GENERAL	
Ambient temperature	-30°C+70°C
Relative humidity	95% non-condensing
Dimensions	120H x 125W x 50D mm
Weight	0.32 kg
Housing	IP54 ABS
Keyboard	1 front panel key optional
CERTIFICATES AND APPROVALS	
CE	IEC 61000-4-2 (ESD), IEC 61000-4-3 (EM), IEC 61000-4-4 (EFT),
	IEC 61000-4-6 (Conducted), IEC 61000-6-4 (Emission)
COMMUNICATIONS	
GPRS/SMS	QUAD band GPRS/SMS, TCP/IP client or server (up to 2 concurrent TCP connections)
Antenna	2.4 dBi internal antenna standard.
SIM card holder	Internal micro SIM
Optical interface	Full duplex, 9600 bps, 8 bits, 1 stop bit, no parity
SENSING	
General	
Cover tamper detection	Yes
Volume	
Type Dulas unification	Duai microelectronic sensor, 4Hz max.
Pulse verification	Yes
Magnetic tamper detection	Yes
VALVE MOTOR DRIVE OUTPUTS	
GENERAL Ambient temperature Relative humidity Dimensions Weight Housing Keyboard CERTIFICATES AND APPROVALS CE COMMUNICATIONS GPRS/SMS Antenna SIM card holder Optical interface SENSING General Cover tamper detection Volume Type Pulse verification Magnetic tamper detection Volume Type Pulse verification Magnetic tamper detection Magnetic tamper detection Magnetic tamper detection Magnetic tamper detection Altistorical archive General purpose data logging Event log Communications log Alarm log Parameter change log	Optional bidirectional DC outputs, 0.5 A max., 3.6V, rotate, brake, off modes, current monitoring,
	seating detection, timeout protection. No flow verification.
ARCHIVING AND LOGGING	
Historical archive	180 days hourly, 180 days daily, 60 months monthly values
General purpose data logging	10000 records. Configurable per parameter logging interval from 15 mins to 24 hrs
Event log	Last 250 events
Communications log	Last 250 events
Alarm log	Last 500 alarms
Parameter change log	Last 400 changes





0

Q

Trade marks and products appear in this document are the property of their respective owners. Manufacturer reserves the right to make changes in this document without prior notice. Copyright (C) 2018-2020

