



METERMADE® N1

Ultra low-power, weather-sealed flow meter cellular RTU



PRODUCT HIGHLIGHTS

The Metermade® N1 Meter Interface Unit (MIU) is an ultra-low power device, designed to operate in the field for up to ten years on a single set of batteries (based on one report per day). Its housing meets the IP68 rating, permitting direct installation onto a flow meter and is capable of operating at a depth of four metres for four days.

The N1 is equipped with an internal 3G cellular module, capable of operating on the majority of cellular networks worldwide. It is approved for use on all Australian cellular networks.

The Metermade® N1 is the lowest cost option to provide highly reliable billing revenue data, directly to a host database using the industry standard DNP3 protocol. Remote configuration and device management is supported via leading industry SCADA applications.

The N1 is equipped with a single pulse digital input and a tamper detection digital input. It also features a “magnetic swipe” function to allow on-demand meter reads and data updates by field personnel.

The MIU configuration supports bulk editing / generation permitting high volume configuration and deployment.

TECHNICAL SPECIFICATIONS

GENERAL

Supply Voltage	3.5 – 8.5 V DC High-capacity, internal Lithium battery pack (field replaceable)
Current Draw	33 μ A sleep, 4 mA active, 200 mA 3G communications, 2 A (peak) 3G network detect (measured at 3.6 V DC)
Real Time Clock	Internal – Year, month, date, hour, minute, second Automatic DNP3 time synchronisation from host
Temperature	-20 to +65° Celsius
Humidity	0 to 90% relative humidity, non-condensing
Programming	External Metermade® programming cable Metermade® Toolbox configuration software (Windows XP / 7)
Dimensions	990 mm (h) x 125 mm (d, nominal) / 155 mm (d, maximum)

IO INTERFACES

Digital Input	2x low-current dry-contact binary inputs 1x input for meter pulse - 32-bit counter, up to 10Khz 1x input for tamper detect - 32-bit counter
System Input	Internal measurement of 3G network RSSI, MIU temperature and MIU battery voltage

TELEMETRY

3G Cellular	Supports 3.5G / HSDPA / UMTS, SMS capability for remote monitoring and diagnosis Tri-band 850 / 1900 / 2100 MHz, Class 3 power output (+24 dBm)
Antenna	Internal antenna
SIM Card	1.8 and 3V UICC (Standard size SIM card)
Approvals	Telstra NextG / Vodafone 3G / Optus 3G
Data Protocol	DNP3.0 unsolicited / polled support (Refer to DNP3 Device Profile)
Host Support	True TCP support to DNP host (supports primary / secondary servers)

FACTORY ACCESSORIES

Meter Probes	Terminated pulse-output meter probes to suit all common industry standard water meters
Mounting	Mounting bracket supplied for direct installation onto existing water meter or surface/panel mounting, supplied in 316 stainless steel
Magnetic Swipe	Replacement magnetic swipe with keyring



FEATURE OVERVIEW



Automation Group

Sydney • Newcastle • Dubbo • Brisbane • Melbourne • Perth

P 1300 724 743 E sales@automationgroup.com.au W automationgroup.com.au