



Innov8tiveModbus Master (with SMS)

Innovative SCADA Solutions Pty Ltd specialises in developing innovative wireless solutions for the SCADA and telemetry industry. Innov8tiveModbus Master (with SMS) has been developed to combine a Modbus Server with SMS capability inside a GSM modem. Traditionally, external intelligent devices were needed to communicate with Modbus slave devices. Based on preconfigured threshold levels, they would send out alert SMSs if these levels were exceeded. Now these functions are innovatively combined and integrated into the GSM modem, eliminating the need for an external intelligent device. The intelligence is cleverly built into the Innov8tiveModbus Master (with SMS) application that resides inside the modem.

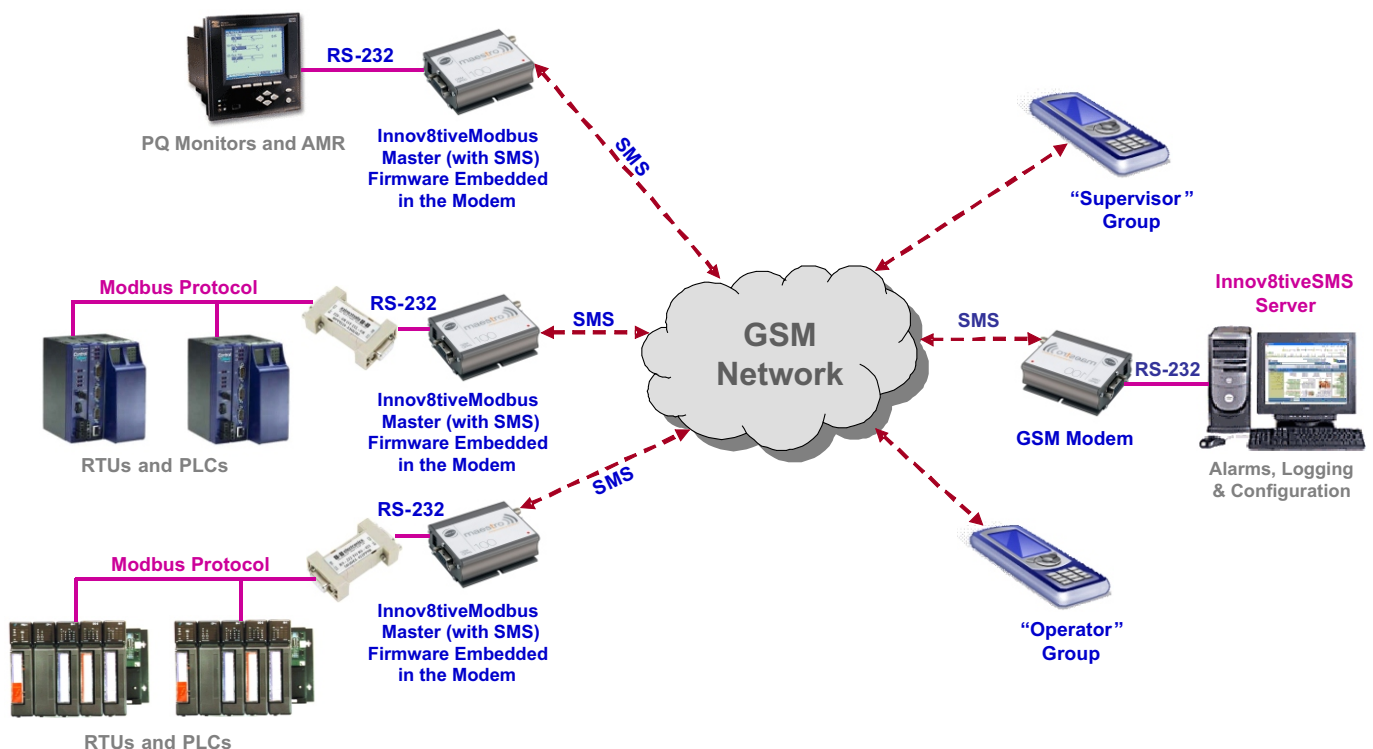
The Innov8tiveModbus Master (with SMS) solution is compatible with the Innov8tiveSMS server.

Applications

- **Water Utilities** - fresh and waste water level alarms, pump control, flow measurements etc.
- **Electrical Utilities** - fault indicators, reclosers, transformer temperature alerts, feeder monitoring & control, power quality etc.
- **Metering** - water, electricity and gas
- **Rental or mobile equipment** remote monitoring & control
- **Building management, HVAC**
- **Street lights** - power consumption and control
- **Security** - movement detection and video transmission
- **Load profiling** for electrical & water parameters, sensor measurements such as pressure, temperature, humidity, flow rate etc.
- **Connect to HART Multiplexers** for remote communications with Asset Management Systems.

Features

- **Compatible** with Modbus RTU protocol devices (PLCs, RTUs, meters, data loggers etc) using Modbus functions 1 - 6.
- **User-friendly** Graphical User Interface (GUI) for configuration, downloading and uploading.
- **Easy to configure** - setup within minutes. The configuration parameters can be saved and downloaded into other GSM modems with the Innov8tiveModbus Master application inside.
- **Sends alert SMSs** to Innov8tiveSMS server software and /or mobile phones.
- **Sends periodic parameters** via SMSs back to the Innov8tiveSMS server software for logging. Extremely useful for low-cost Modbus devices that do not support local logging.





Innov8tiveModbus Master (with SMS)

Features

- Supports remote control, acknowledgements and configuration via SMS.
- Supports multiple contacts and groups.
- Hysteresis used to prevent excessive SMSs when values oscillate near to threshold levels.
- Only authorised mobile numbers are able to remotely configure, acknowledge alarms or perform controls.
- Unused mobile numbers and certain parameters can be deactivated remotely.
- Uses standard OpenAT programming platform.
- AES 128 Bit encryption used for the password.
- Developed in Australia for world wide usage.

Advantages and Benefits

- The GSM modems are shipped with the Innov8tiveModbus Master application inside. Only configuration specific to your devices are needed.
- Compatible with most GSM networks worldwide.
- Cost-effective. The Innov8tiveModbus Master application is inside the GSM modem. No external intelligent devices are needed.
- Compatibility. Make the most of all your Modbus field devices as they can now communicate with the Innov8tiveModbus Master application.
- Use inexpensive SMS to send alarms and data for logging as it is event or time driven.

General Features

- Quad band GSM - 850 / 900 / 1800 / 1900 Mhz
- GPRS class 10 / EDGE class 10
- ETSI GSM Phase 2+ compliant
- Din Rail Mountable
- Built-in watchdog to prevent modem lock-up
- Control via AT commands (GSM 07.05, GSM 07.07 and Wavecom)
- Temperature range:
 - Operational: -20°C to +55°C
 - Functional: 40°C to +85°C
 - Storage: -40°C to +85°C
- Casing: Metal / Plastic
- Dimensions: 90 x 72 x 33mm
- Weight: 100g

Electrical Characteristics

- Supply voltage range: 5-32V DC

Power Consumption:

- GSM 850/900 (PLC 5):
310mA@5V, 50mA@32V
- DCS 1800/PCS 1900 (PLC 0):
240mA@5V, 40mA@32V
- GPRS 850/900 CL10 (PCL 5):
520mA@5V, 80mA@32V
- GPRS 1800/1900 CL10 (PCL 0):
390mA@5V, 70mA@32V
- Idle consumption: 80mA@5V,
18mA@32V

Output Power:

- 2W for GSM850/900
GPRS850/900
- 1W for GSM1800/1900
GPRS1800/1900
- 0.5W for EGPRS 850/900
- 0.4W for EGPRS 1800/1900

GPRS / EGPRS

- GPRS Multislot class 10 / EGPRS Multislot class 10
- Mobile station class B
- PBCH support
- GPRS Coding schemes CS1-CS4

SMS

- Point-to-point MO/MT
- Text and PDU

Interfaces

- Antenna: SMA female connector
- RS232 on 9 pin female Sub-D connector
- DC(4 pin) power supply connector
- SIM card: 1.8V / 3V

Software Support

- Processor: Wavecom Wireless CPU
- Memory: 256KB SRAM & 1.5MB Flash
- OS : Wavecom OPEN AT

Pre-installed Features

- AUTOTCP
- AT Command over SMS
- Modem status check and monitoring
- Command line Interface to program sequence of actions driven by events
- Download Over The Air (DOTA) for application software upgrade
- Download Over The Air (DOTA) for firmware upgrade (available at a later stage)

Ordering Information

- M100-MODM-S - Innov8tiveSMS Server.
- M100-MODM-CEL - Innov8tiveSMS client Elementary level license.
- M100-MODM-CAD - Innov8tiveSMS client Advanced level license.
- M100-MODM-CEN - Innov8tiveSMS client Enterprise level license.

