

MESSENGER F63-PSTN

APPLICATION

The PSTN (Public Switched Telephone Network) Messenger has been developed to allow deployment of Messenger products where GSM coverage is unavailable or signal strength is poor, however fixed telephone landlines are available. Typical siting would be the basement of a building or for monitoring equipment in sparsely populated areas where existing landlines are the only means of communication. The PSTN Messenger offers the same functionality as the Messenger M61.

OPERATION

PSTN Messenger has a built in fixed line modem and 10 year life, lithium battery. Up to 12 Digital inputs can be monitored. In the event of an input being triggered the unit initiates a data call to the PC based Messenger Host Terminal PC. The telephone number of the Host Terminal is pre-programmed into the Messenger and can be edited over air at a later stage without the need for a site visit. The

Host terminal can accept real time information from any combination of messenger unit types, providing a total monitoring solution regardless of equipment location. The PSTN Messenger can communicate with the host software via an internal telephone system, for equipment monitoring at, for example a large industrial complex where use of the GSM Network would incur an unnecessary cost.

Alarm and reset messages forwarded to Host Terminal/mobile phone(s) include the following information:

- Type, serial number and details of equipment being monitored
- Date/Time alarm event occurred
- Type of alarm (alarm/reset)

If for any reason an alarm call fails Messenger has a retry algorithm to ensure message delivery.



The Messenger Host Terminal application alerts users to alarms and can display the status of related Messenger unit's, alarm and contact histories. Field staff can be notified automatically by an SMS text message or e-mail initiated by the Messenger Host in the event of alarm conditions.

During contact with the Host Terminal the Messenger unit recalibrates its real time clock and updates any operational settings that users may have edited.

PRODUCT FUNCTION QUICK REFERENCE GUIDE

	F61 Messenger	F62 Messenger	F62-GPS Messenger	F62-SMS Messenger	F63-PSTN Messenger
Digital inputs x 8		✓		✓	
Digital inputs x 12	✓		✓		✓
Meter Pulse counting inputs x 8		✓		✓	
Expansion to 24 inputs	✓	✓	✓	✓	✓
Mains powered		✓		✓	
Battery Back up (lead acid)		✓		✓	
Self powered (Lithium)	✓		✓		✓
Reports to host software (See spec sheet)	✓	✓	✓		✓
Sends SMS alarms directly to mobiles				✓	
GPS receiver			✓		
Operates with data enabled SIM card	✓	✓	✓	✓	
Operates with 'Pay as you Go' SIM card				✓	
Operates with fixed landline					✓
Additional expansion ports		✓		✓	
Automatic mains & battery monitoring		✓		✓	

TECHNICAL SPECIFICATION

COMMUNICATIONS

Standard Line Modem V22bis PSTN socket modem connection via RJ11 connector. Global PSTN approvals.

INPUTS

Inputs can be wired as either 12 x opto isolated inputs or 24 x direct connections

Type Normally Open / Closed is software selectable.
Flutter suppression on individual inputs is software selectable if required.

Minimum time required to detect input operation (i.e. debounce) 500 ms

Opto isolated inputs 5kV isolation across inputs, 24V nominal (80V-breakdown voltage between live and common).

Directly connected inputs Non-isolated, switched to zero volts.

Input terminals High Density Connector. Maximum conductor size 24 awg

On board Event Logs 100 (expandable if required)

On board Comms Logs 100 (expandable if required)

POWER SUPPLY

External Supply Not Required

Battery specification 36Ah Double 'D' Lithium (Pulses Plus tm)
84w x 60h x 36d

current consumption Quiescent: 10 micro Amps (nominal)
TX/RX: 200mA at 3.6V

ENCLOSURE

Rating IP68

Material Non Flammable Polycarbonate, colour RAL 7035

Dimensions 130mm (h) x 130mm (w) x 75mm (d)

Mounting 4 x M4 (5mm diameter) wall mounting holes. Holes located outside watertight seal. Holes at 115mm vertical and horizontal centres.

Standard Cable entry 1 x 20mm hole fitted with IP68 cable entry gland. Gland accepts cable diameters in range 4mm to 7mm.

GENERAL

Approx. Weight (inc. modem and stub antenna) 0.7Kg

Operational temp range -20°C to +55°C (GSM Modem)
-45°C to +60°C (Messenger unit)

Retry Algorithm (in case of failed calls/busy Host) 10 retries at approximately 1 minute intervals, followed by a 24 hour wait and then starts call attempts again.

Health Check test call frequency 1 to 99 days and option to disable