

MESSENGER F62

APPLICATION

The Messenger 62 is suitable for any pulse counting/general alarm monitoring application where the equipment to be monitored has volt-free output contacts. Messenger counts pulses on up to 8 inputs and has 8 digital inputs. Messenger reports alarms and counter values to a remote PC and/or mobile phones by using the GSM (mobile phone) network. Messenger is AC powered and monitors/reports loss and restoration of mains supply. To facilitate integration the unit is fitted with an expansion port. A local diagnostic/configuration port is also fitted.

OPERATION

Messenger is triggered to contact the Host PC by one of the following events:

- Mains failure/reset
- Battery/regulator fault
- Digital Input change of status (NO to NC or NC to NO)
- Date/Time has arrived for next routine test call to Host

Once triggered, the Messenger will dial the pre-programmed telephone number and enter a two-way exchange of data with the Host Terminal.

Because all information from Messenger units is formatted and sent using data technology over the GSM network, installation is simple and provides excellent communications coverage. The PC based Messenger Host terminal can be used as a site editing suite.

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)

Counter values on all 8 of the pulse counting inputs are passed to the Host during every contact.



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

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 Modem	GSM 900/1800 (dual band) integrated modem. Requires a data enabled SIM card. Optional 900/1900 (dual band)
Antenna	On board stub antenna. Can be replaced by external antenna and lead.

INPUTS

Type	24 direct connections 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)	10 ms
Counter inputs	Inputs 1-8 are configured as pulse counter inputs.
Directly connected inputs	Non-isolated, switched to zero volts.
Input terminals	High Density Connector. Maximum conductor size 24 awg. Two part screw terminal connectors wire size 0.14-1.5mm ²
On board Input Event Logs Memory	100 (expandable if required)
On board Comms Event Logs Memory	100 (expandable if required)

POWER SUPPLY

External Supply	230/115v ac, switch selectable, 1A fused nominal power 100 mWatts
Battery specification	Double 'D' "Cyclon" sealed lead acid 2.5Ah 4V 78w x 68h x 44d. Giving approx. 7 days standby power
current consumption	Quiescent: 1 mA. TX/RX: 200mA to 600mA at 4V dc. Max. charge 800mA. Current limited by mains PTC and dc regulator.

ENCLOSURE

Rating	IP68 with vent to IPX4
Material	Non Flammable Polycarbonate, colour RAL 7035
Dimensions	182mm (h) x 180mm (w) x 90mm (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	Mains: 1 x 20mm hole fitted with IP68 cable entry gland. Gland accepts cable diameters in range 5mm to 10mm. Inputs: 1 x M25 hole fitted into IP68 cable entry gland accepts cable diameters in range 6mm to 13mm.

GENERAL

Approx. Weight (inc. modem and stub antenna)	1 Kg
Operational temp range	-20°C to +55°C (GSM Modem) -40°C to +70°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

APPROVALS

Independantly approved	EN61010-1:2001, EN60068-2-1, EN60068-2-2, EN60068-2-3, EN61326:1997
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