

Single & Multiple channel Tank Content monitors & Data Acquisition units

Versatile, simple to apply, & cost effective, attributes common to all members of PSM's family of tank monitors.

Developing on the capabilities of its highly successful predecessor, the range offers comprehensive display & control facilities to keep you clearly in the picture.

From a single tank installation, through a small tank farm, to a complete plant or ship wide network, the flexibility and connectivity offered by all units ensures that tailoring the optimum system for your particular application is straightforward & simple.

Particular attention has been paid to packaging the products for simple installation under the harsh environmental conditions often found in Marine and Industrial applications. They are offered in a choice of housing formats, both panel and weatherproof wall mount. For multi-tank installations the housings feature sufficient space for direct marshalling and termination of field signal cabling. Single tank units feature both a large LED and an alphanumeric LCD display. Multi-channel units may be either "blind" when used for data acquisition and processing, or be equipped with a multi-line LCD for local display.

All units feature an RS485 serial port for network communications, and an RS232 port for host communications and local configuration. Network communication employs PSM's own highly secure protocol, with host communication based on industry standards. This facilitates simple information sharing with systems from other manufacturers.

Naturally all ITM's are fully compatible with PSM's range of Hydrostatic and Ultrasonic Level transmitters, including all Marine "Type Approved" and Intrinsically Safe certified versions.



For more comprehensive display facilities PSM offer stand-alone Graphic LCD panels and "TANKVIEW FOR WINDOWS", a PC based graphical monitoring package running in the Windows environment.

Model Options

Single Tank Unit (STU)

Providing full stand alone monitoring and control facilities for one tank The unit has up to three 4 to 20 mA inputs for level, top pressure, and S.G. or temperature. Up to four control or alarm relay outputs, and a 4 to 20 mA retransmission (volume corrected) are also included.

Multi Tank Unit (MTU)

The basic unit has 8 x 4 to 20 mA inputs and 16 digital (volt free contact) inputs. A further 32 x 4 to 20 mA inputs may be added, allowing up to 40 vented tanks to be monitored from one unit. An 8 channel 4 to 20 mA retransmission card, and a 16 relay (mains rated SPCO) may also be added to provide comprehensive local control facilities. Display is a multi-line alpha-numeric LCD or optionally an LCD graphic panel. The integral keypad provides full access to the operation & set-up menus.

Data Acquisition Module (DAM)

In effect this is a "blind" version of the MTU intended for use where the display is required remote from the data collection point. For example the DAM might be mounted out in the plant area sited for economic cabling of all I/O signals and routing the processed data via an RS485 link to the main display in the control room.

Input Display Module (IDM)

This unit has no direct plant inputs or outputs, it communicates serially with other units to act as a remote or repeater display.

Key Features

Expandability - from 1 to 100 tanks and beyond

Ease of use - simple to use menu structures, accessed either locally or via PC link

Flexibility - look up table programmable for any shape of pressurised or vented tank. Tank name, product details, and engineering units are all user defined.

Control - 16 output relays for control / alarm monitoring. inputs for alarms from other systems

S.G. Correction - manually programmable or automatically calculated by the monitor

Communications - RS485 unit to unit, and RS232 output to other systems. 4 to 20 mA retransmission signals

Local Display - both LED and LCD displays are used to provide a complete picture of the current status

Security - password protected non volatile Memory.

Simple menu driven/push button operation with functional checks available at any time (holds empty or filled.)

STU

Packaging : Enclosure options of DIN 96 mm Panel mount, and IP65 wall mount weatherproof .

Display : 2 line X 16 character alphanumeric LCD, & 6 decade "superbright" 14.2 mm LED.

Operation : Fully menu driven accessed via 5 multifunction buttons on front panel.

Power requirement : 24 V DC , or 110 / 240 V AC.

Inputs : 3 No. 4 to 20 mA . Transmitter power supply may be selected /de-selected as required.

Retransmission : Isolated 4 to 20 mA, maximum load 500 ohms

Relay outputs : 4 No. SPCO relays rated 5A 250 V AC

Serial Communications : 1 x RS 232 local port, 1 x RS 485 network port

Note : The **IDM** variant has a similar packaging & functionality to the **STU** variant with the exception that no local input or outputs are fitted.

STU specifications

Housing	Enclosure options of DIN 96 mm Panel mount, and IP65 wall mount weatherproof .
Display	2 line X 16 character alphanumeric LCD, & 6 decade "superbright" 14.2 mm LED. Operation : Fully menu driven accessed via 5 multifunction buttons on front panel
Power requirement	24 V DC , or 110 / 240 V AC.
Inputs	3 No. 4 to 20 mA . Transmitter power supply may be selected /de-selected as required.
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Serial communication	1 x RS 232 local port, 1 x RS 485 network port



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2200 Series



MTU

Housing : IP65 Wall mounting epoxy coated steel. Size to suit I/O capacity and field wiring.

Display : 8 line X 30 Character alphanumeric LCD.

Operation : Menu driven accessed via integral 16 button keypad.

Power requirement : 24V DC or 110/220/240 V AC

Standard Inputs : 8 No 4 to 20 mA. Transmitter power supply may be selected if required. 16 No digital Volt free contact closure inputs

Optional Retransmission : 8 No. Isolated 4 to 20 mA.

Optional Relay outputs : 16 No. SPCO relays rated 5A 250 V AC

Optional Input expander : A further 32 No 4 to 20 mA inputs. With transmitter power supply.

Serial Communications : 2 x RS232 local port, 2 x RS485 network port

Note : The **DAM** has a similar packaging to the **MTU** but is not fitted with a display/keypad.

MTU specifications

Housing

IP65 Wall mounting epoxy coated steel. Size to suit I/O capacity and field wiring

Display

8 line X 30 Character alphanumeric LCD

Power requirement

24V DC or 110/220/240 V AC

Standard Inputs

8 No 4 to 20 mA. Transmitter power supply may be selected if required 16 No digital Volt free contact closure inputs

Operation

Menu driven accessed via integral 16 button keypad

Optional Retransmission

8 No. Isolated 4 to 20 mA

Optional Relay outputs

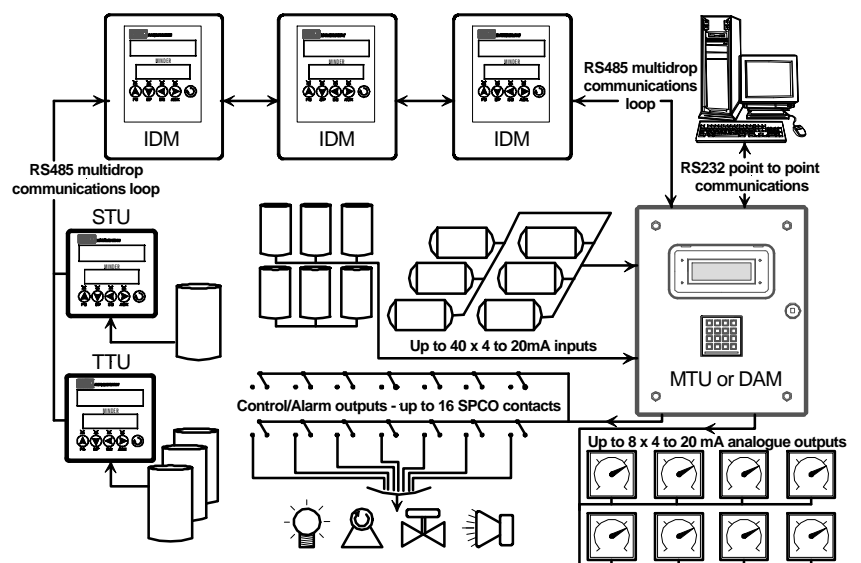
16 No. SPCO relays rated 5A 250 V AC

Optional Input expander

A further 16 or 32 No 4 to 20 mA inputs. With transmitter power supply

Serial Communications

2 x RS232 local port, 2 x RS485 network port



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