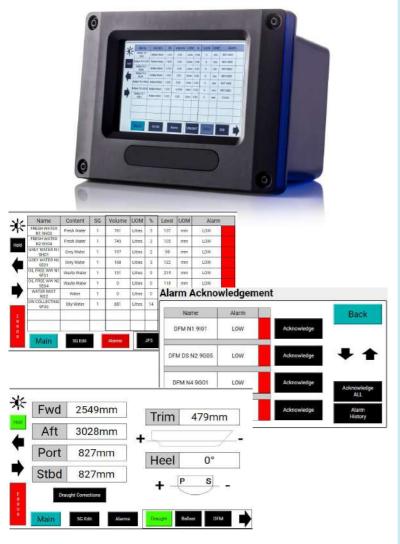# VPM 4300 Data Acquisition, Processing, and Display Module.

Key features

- Acquisition, processing, display, and control module providing a full tank gauging solution

- 7" VGA high visibility touchscreen

- Powerful ARM A9 Quad core processor running Linux O.S. 1 GB DDR RAM and solid state memory with 100% Back-up

- Dual Independant RS485 I/O ports supporting Modbus RTU. Ethernet Port for interconnection of multiple display units

- Panel or wall mount installation

- Versatile HMI that is used by PSM as a tank gauging solution but is equally well suited to development for other acquisition and display applications

Innovative and powerful HMI for a variety of applications

The VPM 4300 Versatile Process Monitor from PSM is an operator panel providing signal acquisition, processing and local display, with the ability to provide a comprehensive real-time status report via serial connection to higher level systems.

As a tank gauging specialist PSM have developed the platform to work with our range of intelligent tank level transmitters, but the core functionality and processing power lends itself to simple development for other applications.

Acquisition of data is via an RS485 port supporting Modbus protocol. The VPM acts as Modbus Master and interrogates all connected devices. comprehensive signal scaling and processing allows a clear graphical display of real-time data on the integral 7" touch-screen

Multiple alarm setpoints may assigned to display channels to give a visual indication onscreen and, if required, trigger external relays for remote alarms

Data logging enables the history of specific data to be reviewed

VPM4300 is based around an intuitive user interface. All functions may be accessed via a comprehensive yet simple to use, menu system. Alternatively configuration for a particular application may be created offline using a PSM supplied spreadsheet and the resulting file uploaded to the VPM via USB port.

The display contains all of the configuration tools needed to setup or replace connected PSM transmitters, meaning commissioning and system maintenance does not require specialist equipment or assistance.

With all inputs coming via an RS485 / Modbus port as well as direct connection to PSM transmitters a range of A to D converters allow connection of conventional analgoue signals such as 4-20mA and status signals from contact closure (alarm switches).

Output to third-party systems is again via RS 485 Modbus , and VPM can provide a comprehensive status report on all input parameters in a formatted map.

An Ethernet Port enables up to 6 VPM indicators to be interconnected, each sharing data and displaying all results.

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Specifications

Screen size	7"
Resolution	VGA 4:3 640 x 480 pixels
Input devices	Integral touchscreen USB keyboard & mouse
Processor / memory / storage	CPU - TX6Q-1030 Core: ARM Quad Core A9 Onboard RAM: 1GB DDR3 NAND Flash - 128Mb onboard + 2 x SDHC Slots
Operating system	Linux
Programming and configuration	Fully configurable via integral menu functions. May also be supplied configured or updated via front panel USB.
I/O ports for basic functionality	Front panel behind removable cover: • 2 x USB host • 1 x USB OTG • Multiple activity status LED's Rear panel: • 1 x SD card - for Back-up memory (Main memory is by SD card within the unit • 2 x RS 485 • 1 x Ethernet • 2 x ports for analogue / digital expansion cards
Power supply	24 vdc standard / 3A PTC resettable fuse with reverse polarity protection 24 vdc galvanically isolated option
Size	244 x 173 x 81 mm external
Mounting	Panel mount Wall mount via option docking enclosure
Weight	0.7 kg
Material	ABS VO plastic
IP rating	Panel mount: • Front panel IP 65 & rear case IP30 Wall mount: • Front panel IP65 & rear dock IP65
Operating temperature	0 to + 70'C

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Outline dimensions

19,00

140,00

81,00

244,00

154,00

92,55

173,00

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