T: +44 (0)1444 410040 E: sales@psmmarine.com
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VPM 4300 Series Data Acquisition, Processing and Display Module

Key features

- Acquisition, processing, display and control module to provide a full monitoring solution.
- Graphical display via integral 7” capacitive touch screen.
- Powerful NXP i.MX8M Plus Quad processor running Linux O.S. 2GB DDR RAM and 8GB solid-state memory with microSD back-up card.
- Three independent RS485 I/O ports supporting Modbus RTU for connection to APT1000 level transmitters or other devices, and Modbus output to Vessel Management Systems.
- Dual Ethernet Ports allow multiple display units to share data.
- Versatile HMI primarily used by PSM as a tank gauging solution but equally suited for other applications.

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A Flexible and powerful HMI for a variety of applications

The VPM 4300 provides a graphical touchscreen display with acquisition, and processing of input signals connected via its RS485 ports.

Comprehensive status reporting is also provided to higher level systems via RS485 / Modbus RTU.

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 adaptation for other applications.

Acquisition of data is via RS485, with 3 discrete ports 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 touchscreen.

Multiple alarm set points may be assigned to display channels to give a visual indication on screen and, if required, trigger external relays for remote alarms.

Operator interface is via PSM's intuitive "Connect" firmware. All functions are accessed via a comprehensive menu system with password protection as required.

The VPM also acts as a web server via its Ethernet ports meaning external devices such as PC's may be directly connected, allowing full system configuration and display via a standard web browser.

Multiple VPM displays may also be interconnected via Ethernet, each sharing the data from their own inputs, meaning data may be displayed at all locations, with each having screen presentations tailored to their specific needs.

Inbuilt diagnostic and support software enables full network testing for initial commissioning, and reconfiguration where replacement or expanded inputs are fitted.

PSM's APT1000 intelligent level and pressure transmitters provide an RS485 / Modbus output for direct connection to the VPM. Additionally, various AtoD modules are offered by PSM to allow analogue signals such as 4-20mA, and on/off status signals from contact closure (alarm switches).

Expanding the display possibilities, PSM's "VPM Remote" provides a larger touch-screen without the need for a PC, and RS485/Modbus output to third-party systems provides a configurable compre-hensive map of all system parameters.

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Specifications	
Screen size	7”
Resolution	1024 x 600
Input / Operation	Signal input via RS485 / Ethernet Integral touchscreen for operation
Processor / memory / storage	Processor - TX8P NXP i.MX8M Plus Quad CPU: 4x Cortex-A53 RAM: 2GB NAND Flash - 8GB 1 x Micro SD (Backup)
Operating system	Linux
Configuration	Fully user configurable via integral menu functions. User interface employs PSM's "Connect" firmware
I/O Connections & Status Indication	Front panel behind removable cover: • 1 x USB Type A • Activity / Status LED’s show Supply Health and comms activity Rear panel: • 3 x RS 485 • 2 x Ethernet • 2 x ports for analogue / digital expansion cards
Power supply	2 x independent 24 vdc with 3A PTC resettable fuse Reverse polarity protection Allows connection of a primary and back-up supply
Size	244 x 173 x 81 mm external (Panel mount version)
Mounting	Panel mount Wall mount via option docking enclosure or Steel Cabinet
Weight	0.7 kg (Panel mount version)
Material	ABS VO plastic
IP rating	Panel mount: • Front panel IP65 & rear case IP30 Wall mount: • Front panel IP65 & rear dock IP65
Operating temperature	0 to +70°C

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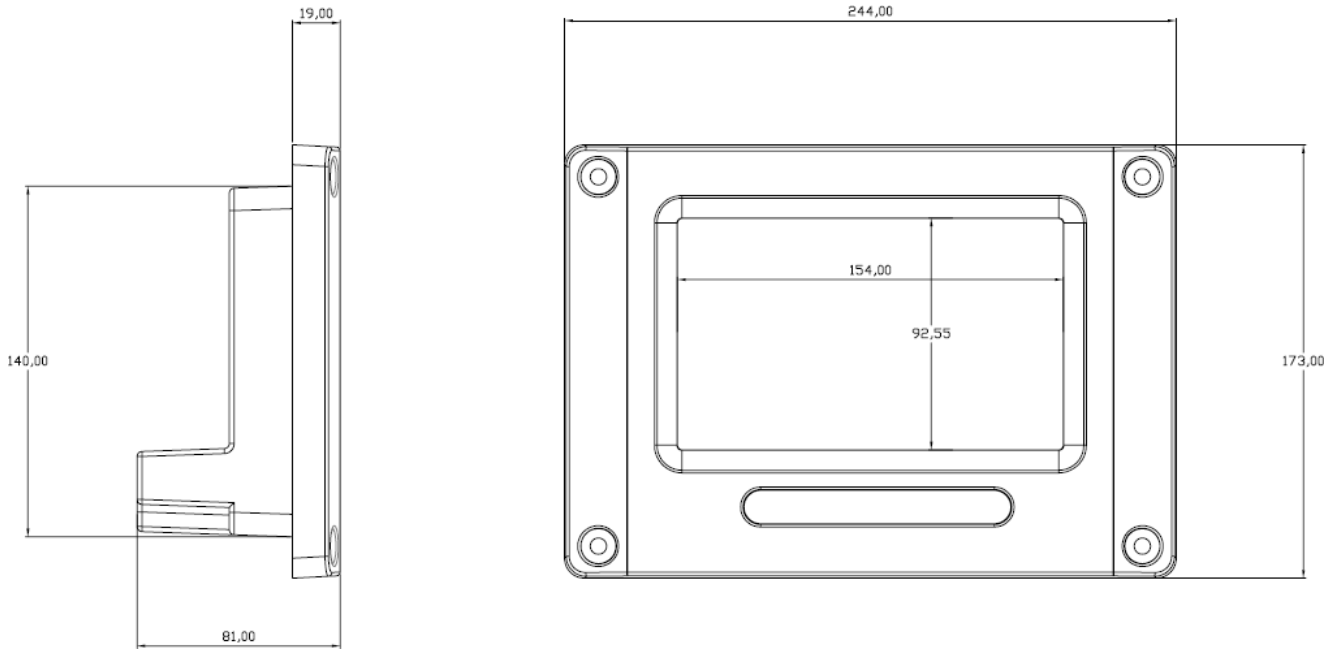
Outline dimensions



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