

HPM6000

Hydraulic data logger

Up to

- 32 **Intelligent Digital** channels
- 16 analogue channels
- 4 million readings per test

The HPM6000 series is a highly-versatile portable hydraulic data logger, ideal for diagnostic testing hydraulic systems, or for use on hydraulic test benches.

Three models allow configuration to meet the needs of the most demanding application, enabling you to simultaneously connect between 16 and 26 different hydraulic sensors. The base model is configured for use with the full range of Intelligent Digital (ID) sensors, using the CAN protocol, while the other two models also allow for connection of Sensor Recognition (SR), current and voltage sensors.

The ID sensors are connected in-line with one another, so saving on cabling and are uniquely identified on the HPM6000. The 5.7 inch colour display can be configured to display the readings in numerical, bar graph, dials and graphical display mode. There are a variety of different data logging modes with the ability to data log up to 4 million measured values per test at a variable interval from 1 ms to 24 hours, with a total possible storage size in excess of 1 billion values.

All data can be exported to a PC running HPMComm 7.0 for further analysis or storage off the unit. The HPM6000 series connectivity is the same across the whole range - USB slave and USB host allow the unit to stream to a PC or laptop and allow for the connection of additional storage up to 40 GB. The Ethernet port enables remote monitoring over a network if required. The HPM6000 is loaded with technology, yet is simple to configure and easy to use.



Hydraulic measurement and control



Features

- **Complete** range of sensors – pressure, flow, temperature, tachometer
- **Intelligent** digital sensors (CAN protocol) for easier wiring and auto configuration
- **Analogue** sensor inputs (HPM6116, HPM6216) including HPM-SR range, mA, volts
- **Internal** storage for over 36 million readings – expandable to over 1 billion readings
- **Logging** interval of 1 ms to 24 hours
- **Re-chargeable** internal battery – mains charger included
- **Full** colour 5.7 inch display
- **IP64** and rubberised case surround for protection in harsh environments
- **Complete** with HPComm version 7 – PC software
- **Connectivity** – USB Host, USB slave, Ethernet



Specifications

Model number	Intelligent Digital inputs (CAN)	Analogue input channel
SR-HPM-6016-05-0C-CAN	2 lines - max of 8 sensors per line, 16 sensors in total (up to 32 channels)	None
SR-HPM-6116-05-0C-CAN	2 lines - max of 8 sensors per line, 16 sensors in total (up to 32 channels)	3 SR sensors (up to 6 channels) 2 configurable auxiliary inputs
SR-HPM-6216-05-0C-CAN	2 lines - max of 8 sensors per line, 16 sensors in total (up to 32 channels)	6 SR sensors (up to 12 channels) 4 configurable auxiliary inputs

Note: Some sensors, such as the PTT pressure transducers that include a temperature sensor built-in, are one sensor that uses two channels.

Functional specification

Operating temperature: 0 to 50 °C (32 - 122 °F)
Degree of protection : IP64 (EN60529)

Electrical specification:

Internal: Lithium ion pack 7.4 VDC/4500 mAh
 Battery life with 3 CAN sensors >8 hours
 External: Input -100-240 VAC, Output - 24 VDC/2500 mA

Memory:

Via USB drive - 1GB Max. (not included)
 Via MicroSD - 2 GB Max. (included)
 Internal memory - 10 MB

Input / Outputs:

Intelligent digital inputs
 2 CAN bus networks each with 16 channels
 Scanning rate:
 1-3 sensors = 1ms
 4-6 sensors = 2ms
 7-8 sensors = 4ms
 Connection - M12 x 1, 5-pin SPEEDCON

D in /out - scanning rate 1 ms
 Digital trigger input -
 Digital trigger output -

Connector M8 x 1, 4 pin, male
 Impedance 1k Ohms,
 Levels: high>7..24 VDC, low<1 VDC
 Switch up to +24 VDC - max 20mA

USB Slave - USB 2.0, Socket type B
 USB host - USB 2.0, Socket type A
 Ethernet - 10/100 Mbit/s- IEEE 802.3, RJ45

Analogue inputs
 SR inputs - (Webtec SR range only)
 Scanning rate 1 ms
 Connection - 5 pin combination plug / socket

Auxiliary inputs (for measuring current and voltage)
 Scanning rate ms (0.1 ms on one channel per auxiliary card)
 Connection M12 x 1 5 pin socket
 Voltage measuring range -10 to +10 VDC (configurable)
 Current measuring range 0 or 4 to 20 mA
 Supply +18 to +24 VDC, max 100mA

Construction material:

Housing material: ABS/PC
 Housing protective shield: TPE
 Dimensions, w x h x d, mm (inches): 257 (10) x 74.5 (3) x 181 (7)
 Weight: 1550 grams (HPM-6016)
 Display: TFT-colour LCD, Visible area 115 x 86 mm, Resolution 640 x 480 pixels

PC Software:

HPM6000 is supplied with HPMComm software to enable real-time datalogging from a PC, or transfer of data to a PC for further analysis and graphing. HPMComm is Windows compatible software (32 bit only).



APPROVED