# 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.



Manufacturers of hydraulic components and test equipment for the Mobile, Industrial and Agricultural industries



Nuffield Road, St. Ives, Cambs., PE27 3LZ, UK Tel: +44(0)1480 397400



## 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 -

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

Digital trigger output -

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: Housing protective shield: Dimensions, w x h x d, mm (inches): Weight: Display: ABS/PC TPE 257 (10) x 74.5 (3) x 181 (7) 1550 grams (HPM-6016) 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).

