DATA ACQUISITION SYSTEM and SOFTWARE

HPM15

1 to 2 participants

Space required **1(L)x0.5(W) m**

Features

- Compact and versatile
- 23 Channels
- Compatible with UTM Magnus (HPM) experiments
- Compatible with bespoke customer experiments
- Software for live data capture, viewing, retrieval and channel configuration
- Quick connection terminals
- Universal power supply and plug fronts
- USB interface
- Engineering units displayed: N, mm, microstrain, bar.
- ‘Online’ or ‘Offline’ mode
- Frame or bench mountable

Description

The HPM15 Interface has been designed to function with UTM Magnus (HPM) experiments fitted with appropriate transducers. It has the facility to display, record, store and review parameters of strain, pressure, force and deflection and can be operated in two modes; with PC (USB) or without PC (Standalone). The unit is a fully integrated data acquisition / signal conditioning interface. Each of the 23 channels has its own signal conditioning. The variables, either displayed on the internal LCD, or PC software, are returned as 'real world' values of either microstrain, Force (N), Pressure (bar) or deflection (mm) making it very user friendly. The local display, along with the USB PC connection, make this a highly flexible and versatile unit for any application. The unit also has the ability to operate with bespoke customer experiments which use appropriate transducers. The HPM15 includes 16 channels for either strain or Force or any combination of the two up to 16 maximum, 6 dial gauge inputs, and one pressure input. It has a front fascia 4 line display, which displays the parameters in standard engineering units. Front fascia buttons also allow the end user to tare the displayed values. Connections to the hardware transducers are made via external sockets surrounding three sides of the interface unit. Mating connectors are either factory fitted to the hardware transducer cables, or can be fitted by the end user. The interface is powered via a universal voltage power supply with removable plug adaptors for different countries. The HPM15 software supplied has

been designed to capture the data from the HPM15 interface. This captured data is displayed live in a variety of different formats including graph, numerical, or bar, and is stored on-board. Retrieval of the data for reviewing is available, along with exporting to other applications. The software also allows for bespoke channel configuration, when customers wish to use the interface and software with their own experiments.

Technical Specification

- Four (4) line LCD display
- 23 Channels; 16 x Strain or Force; 6 x Deflection; 1 x Pressure
- Storage for 100 configurations
- Sample interval: 0.5 to 100 sec
- ¼, ¼D, ½, ½D, and Full Strain gauge arrangement
- Typical Strain Gauges: 120ohm, 2 to 2.15 gauge factor
- Typical Load Cell: “S” or “beam” type; 50 – 3000kg; 10Vdc excitation; 415ohm input impedance
- Typical Pressure sensor 0 to 700Bar, 4 to 20mA; gauge, 8 to 30Vdc excitation
- Deflection: Mitutoyo dial gauge with data output, 0 to 12.7mm range; 0.01 or 0.001mm resolution
- Power supply plug front: UK, EU, US and AUS

Essential Ancillaries

- Host computer
- HPM1: MAGNUS Universal test frame
- HPM3 or HPM3A: Single or Twin Hydraulic Ram System
- Experiment from HPM range with suitable transducers fitted
- Bespoke customer experiment with suitable transducers fitted

Recommended Ancillaries

- HPM20: Dial gauges and holders set
- HPM6/1: Plane Frame
- HPM6/1A: Plane Frame Fitted with Strain Gauges
- HPM4/1: (Manual Only) Ultimate Moment of a Reinforced Concrete Beam
- HPM4/2: (Manual Only) Crack Control in a Reinforced Concrete Beam
- HPM5/1: (Manual Only) Stress Grading of Timber Joists

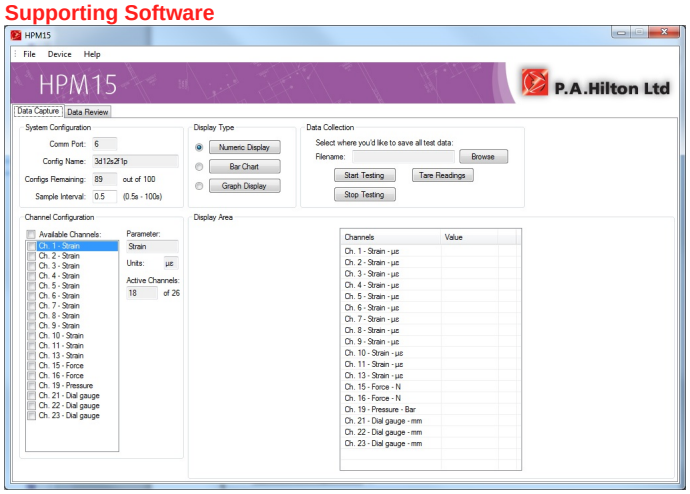
What’s in the Box?

- 1 x Data Acquisition System
- 1 x Software on USB media
- 1 x Back plate for angled mounting
- 2 x Screwdriver
- 1 x USB cable
- 1 x Universal input power supply
- 18 x Multi-way connector
- Instruction manual
- Packing list
- Test sheet

You might also like

- HDA200: Digital Interface
- HAC20: 2 Channel Digital Strain Meter
- HAC20M: 16 Channel Expansion Unit
- HAC20K: Strain Gauge Kit
- HAC20R: Refill kit for HAC20K

Supporting Software



- HPM15 Data Acquisition Software

Minimum System Requirements

- Windows 7; Windows 7 Service Pack 1; Windows Server 2003 Service Pack 2; Windows Server 2008; Windows Server 2008 R2; Windows Server 2008 R2 SP1; Windows Vista Service Pack 1; Windows XP Service Pack 3; Recommended Minimum: Pentium 1 GHz or higher with 512 MB RAM or more; 850MB minimum disk space for x86; 2GB minimum disk space for x64; VGA Monitor capable of at least 16-bit color at 1024 x 768 resolution; USB1.1 or USB2 for data acquisition connection. Powered USB port(s) if possible

Weights & Dimensions

- 250(L) x 160(W) x 60(H) mm
- Net Weight: 2.0 kg
- Gross Weight: 7.0 kg
- Packed Dimensions: 49 x 37 x 15cm

Essential Services

- 110/120V, 60Hz or 220/240V, 50Hz, single phase, live neutral and earth

Operational Conditions

- Storage temperature: -10°C to +70°C
- Operating temperature range: +10°C to +50°C
- Operating relative humidity range: 0 to 95%, noncondensing

Ordering information

To order this product, please call PA Hilton quoting the following code: HPM15

COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS