

# Digital Test & Datalogging Equipment

## MultiHandy 3020

- 3 channel datalogger with standard & ISDS 0/4...20mA inputs (x2) & PnP pulse input (x1)
- 4th channel for differential or power with Min & Max readings, all on one backlit LCD screen
- Scanning rates up to 1ms, space for 14 test files
- Fast USB upload to HYDROcom6 software
- Robust aluminium housing



The MultiHandy 3020 comes with three channels, internal memory of up to 1,000,000 readings, 1ms scanning rate and the ability to record live readings onto HYDROcom6 software making the MultiHandy 3020 an economical solution for measuring multiple channels simultaneously.

**R & D**

**Mobile hydraulics**

**End of Line Testing**

**Plant maintenance**

**Industrial hydraulics**

## DIGITAL TEST & DATALOGGING EQUIPMENT

### MultiHandy 3020

#### Ease of Use

No programming necessary when using Hydro-technik ISDS (Intelligent Sensor Detection System) sensors, just plug in the sensors - switch on - measure,

#### Flexibility

Three inputs, of which two are current (0 or 4...20mA) and the third is a frequency input. Hydrotechnik supplies a wide range of accurate and robust ISDS sensors such as pressure (p), temperature (T), combined pressure/temperature (pT), axial turbine and gear flow meters (Q), RPM sensors (n) & much much more.

Start with a base kit and build up your sensors to meet your exact needs, both now and in the future. Standard industrial sensors are also compatible with the MultiHandy 3020 via the three configurable input channels. Truly universal.

#### Display and Record

A 4th virtual channel can display the difference between measured values. Measure pressure & flow rate then fluid power (P) in kW can be displayed. Min & max values can be also displayed for all channels. Selectable scanning rates enable recording times up to 999 hours.

#### Performance

Connect - display - record - upload - analyse. The MultiHandy 3020 is intuitive, fast, reliable, robust and importantly accurate at  $\pm 0.2\%$  of the full scale reading. Record up to 14 series of data sets with up to 1,000,000 values (analogue) & 333,000 (frequency) per set. Sampling rates are user selectable from 1 ms to 10 minutes, providing performance beyond it's size.

#### Recording & Analysis Software

Hydrotechnik have been innovators behind fluid/gas digital test and datalogging equipment and software for many years. The MultiHandy 3020 is supplied with the new HYDROcom 6 online PC recording & evaluation software aswell as the industry leading HYDROcom 6 analysis software. Gain more understanding from your measurements with our analysis software that becomes an essential tool for archiving, performance monitoring & quality control.

#### Back-up and Support

Just as important as great products and service, Hydrotechnik also prides itself on providing quick and effective support to their wide range of global customers. With experts to answer questions quickly, with a huge range of accessories and spares in stock, along with a full UKAS traceable in-house calibration service, Hydrotechnik are the perfect partner.



All Hydrotechnik instruments support ISDS functionality. ISDS is the automatic transmission of parameters and calibration data from Hydrotechnik sensors (with ISDS signal output) to the measuring instrument.



psi

Hz

Nm

gpm

$\Delta p$

mm

V

rpm

kPa

kN

mbar

ccm

A

$^{\circ}\text{C}$

bar

l/min

mV

$^{\circ}\text{F}$

mm/s



## DIGITAL TEST & DATALOGGING EQUIPMENT

### MultiHandy 3020

# MultiHandy 3020 INSTRUMENT & KITS



### MULTIHANDY 3020 THREE CHANNEL MEASURING INSTRUMENT PART NUMBER 3160-00-72.00

- MultiHandy 3020 instrument
- Multi country mains power supply & charger
- CD ROM with HYDROcom6 software and full user manuals
- USB download cable
- Carry case available as optional extra item



### MULTIHANDY 3020 PRESSURE MEASURING KIT PARTNUMBER 3020p/p-XX\*-XX\*

- MultiHandy 3020 Instrument & accessories above including large carry case
- 2 x selectable PRI00 ISDS pressure sensors (\*see below for ranges & ordering codes)
- 2 x Minimess I 620 female test point to sensor adaptors
- 2 x 5m long measuring cables

Pressure Range	*Replace XX with
0...600 bar (0...8700 psi)	18
0...400 bar (0...5800 psi)	15
0...250 bar (0...3625 psi)	17
0...60 bar (0...870 psi)	21
-1...+6 bar (-14...+87 psi)	32

PRI00 ISDS sensors supplied with calibration certificate traceable to national standards

### PRESSURE, TEMPERATURE & FLOW MEASURING KIT PART NUMBER 3020p/T/Q-XX\*-YY\*

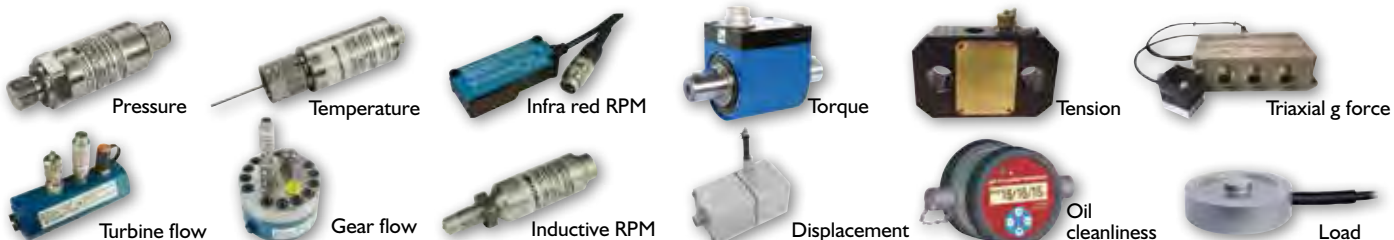
- MultiHandy 3020 Instrument & accessories above including large carry case
- 1 x selectable PRI00 ISDS pressure sensor (\*see above for ranges & ordering codes)
- 1 x QT500 ISDS flow turbine sensor (\*see below for ranges & ordering codes)
- 1 x TE300 ISDS temperature sensor (fits to flow block or via separate p/T test point)
- 1 x Minimess I 620 female test point to sensor adaptors
- 3 x 5m long measuring cables

Flow Range	*Replace YY with
2...75 l/min	70
9...300 l/min	71
16...600 l/min	72

QT500 ISDS sensors supplied with calibration certificate traceable to national standards



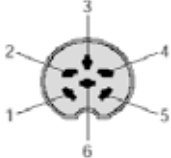
Other sensors available from Hydrotechnik UK:



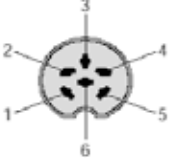
Discover more at [hydrotechnik.co.uk](http://hydrotechnik.co.uk)

### TECHNICAL SPECIFICATIONS

INPUTS	
<b>Channel inputs</b>	2 x Analogue, 1 x frequency
<b>Signal Inputs</b>	0/4...20mA, 0.25 Hz - 5 KHz frequency without direction detection PnP (rate or count).
<b>Accuracy</b>	Analogue $\pm 0.2\%$ full scale. Frequency $\pm 0.2\%$ of actual reading
<b>Calculated channels</b>	One channel for differential pressure, sum or hydraulic power dependent on sensors connected & selectable Min & Max value display.

INPUT PINOUTS - CHANNELS ONE OR TWO			
<b>M16 6 pin female socket numbered pins</b> 	<b>Designation</b>	<b>Pin</b>	<b>Function</b>
	<b>SIGN_I/SIGN_F</b>	1	Analogue signal input 0/4 to 20 mA
	<b>GND</b>	2	Ground
	<b>+Ve</b>	3	Sensor power supply
	<b>Shield</b>	4	Screen/shield
	<b>ISDS</b>	5	ISDS detection

Notes. mA input 105 $\Omega$  / 10nF input impedance. Frequency input 4.7KHz / 100pF input impedance

INPUT PINOUTS - CHANNEL THREE			
<b>M16 6 pin female socket numbered pins</b> 	<b>Designation</b>	<b>Pin</b>	<b>Function</b>
	<b>SIGN_I/SIGN_F</b>	1	Frequency signal of $\pm 0.2\%$ actual reading
	<b>GND</b>	2	Ground
	<b>+Ve</b>	3	Sensor power supply
	<b>Shield</b>	4	Screen/shield
	<b>ISDS</b>	5	ISDS detection

Notes. mA input 105 $\Omega$  / 10nF input impedance. Frequency input 4.7KHz / 100pF input impedance

DATALOGGING	
<b>Max No. of tests</b>	14
<b>Values per test</b>	up to 1,000,000 (analog), 333,000 (frequency) for each of the 14 recordings
<b>Sampling rate</b>	1 kHz (one sample every 1 ms) 12 bit A/D Convertor
<b>Memory capacity</b>	2 Megabytes
<b>Scanning rates</b>	Programmeable from 1 millisecond up to 10 minutes

INSTRUMENT	
<b>Display</b>	2.2" LCD, 8 line with backlight
<b>PC interface</b>	USB 2.0 UART (Virtual COM interface)
<b>Power supply unit</b>	110/240V 50/60Hz Universal mains 12 to 30V
<b>Battery performance</b>	Eight hours continuous use with three sensors connected.
<b>Sensor power supply</b>	Nominal 13-18VDC 90mA
<b>Casing/Dimension</b>	Aluminium (L 167 mm x W 80mm x D 44mm)
<b>Weight</b>	661g
<b>Protection levels</b>	IP 40. Vibration to IEC 60068-2-64: 1994. Shock to IEC 60068-2-27: 1996-03.
<b>Operating Temp.</b>	0 to +50°C @ 0 to 80% relative humidity
<b>Storage Temp</b>	-30 to +70°C

## DIGITAL TEST & DATALOGGING EQUIPMENT

### MultiHandy 3020

## THE HYDROTECHNIK HANDHELD DATALOGGING FAMILY

From our entry level 2025 two channel display datalogger - all the way up to our powerful eight channel MultiSystem 5060 plus, no matter the application we have a data logger to suit your requirements.

### MultiHandy 2025

Entry level 2 channel data logger, for general hydraulic diagnosis.

- 3 line backlit LCD display
- analogue or frequency inputs (ISDS or std.)
- 1 virtual calculation channels (delta p, power etc.)
- Min & Max readings
- 120,000 readings memory
- Storage for 5 test files
- Supplied with HYDROcom 6 software



### MultiSystem 4010

Professional 5 (+5) channel data logger, perfect choice for detailed field service diagnosis.

- 5 channel instrument with bright colour display
- Graph or text display of measurements
- 3 or 4 analogue & 1 or 2 frequency channels (ISDS or std.)
- 5 virtual channels (delta p, power etc & optional CAN)
- Digital I/O for external switching or instrument linking
- Min & Max readings
- Record from selectable triggered events
- 2Gb internal SD card memory
- Space for 100 test files
- Supplied with HYDROcom 6 Advanced software



### MultiSystem 5070

The mobile R&D, service tool, all round instrument of choice for industry professionals.

- 42 channel instrument with bright colour display
- Graph or text display of measurements
- 8 analogue & 2 high speed frequency channels (ISDS or std.)
- Reads most industry sensor outputs for true flexibility
- 32 virtual channels (CANbus signals & calculations)
- Digital I/O for external switching or instrument linking
- Up to 6,000,000 data points per test file
- Record from selectable triggered events
- 4 Gb internal SD card memory
- USB stick upload or download of tests & settings
- Space for 500 test files
- Supplied with HYDROcom 6 Advanced software





## INDUSTRIAL TEST & MEASUREMENT SOLUTIONS

Hydrotechnik UK Ltd is one of the UK's leading test and measurement equipment distributors and manufacturers, servicing a wide range of industries since 1990.

In addition to pressure sensors and instrumentation, Hydrotechnik has a large product portfolio featuring Minimes® test points & adaptors, high pressure microbore hose assemblies and Minimes® test kits for analogue testing, charging, bleeding or sampling of almost any fluid or gas.

We have extensive experience in the design, development, manufacture and commissioning of fluid power test rigs for end of production sign off or component testing. Our test rigs are used in demanding and 'mission critical' applications including defence, manufacturing quality control, plant maintenance and research and development. Users of Hydrotechnik test rigs rigorously test pumps, hydraulic hoses, moulded coolant hoses, pipes, manifolds, tanks, accumulators, valves and many other components to ensure they are fit for purpose.



**Call us on 0800 068 4134 for more information  
and to obtain our other brochures:**

