

# Hydraulic Test & Data Acquisition Equipment



# MultiHandy & MultiSystem Measuring Instruments

From 2 to 40 channels



CANopen  
SAE J1939

## More measuring choices ...than ever before

FORCE/TORQUE

FLOW

DISPLACEMENT

VIBRATION

VOLTAGE/CURRENT

RPM

PRESSURE

TEMPERATURE

## MultiXtend Adaptor boxes to extend

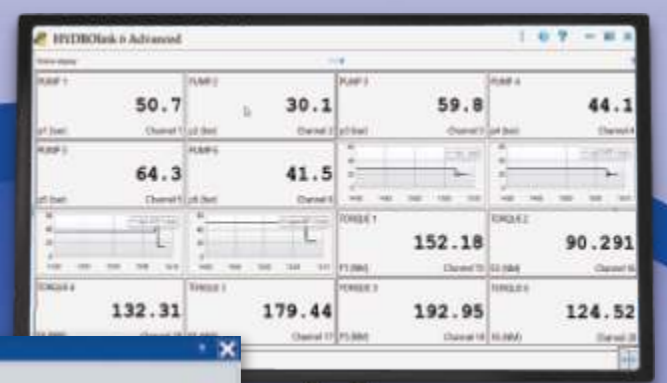
## functionality of MultiHandy &

MultiXtend modules add further measurement options and channel count to MultiHandy or MultiSystem instruments. The MultiXtend Bluetooth module provides wireless data transmission from MultiSystem instruments to HYDROcom 6.



### KEY FEATURES

- Add Voltage & Current measurement
- Add extra 4-20mA channels
- Add extra frequency channels
- Add Type J, K & PT100 Thermocouple sensors
- Bluetooth wireless transmission to PC
- LAN network connection



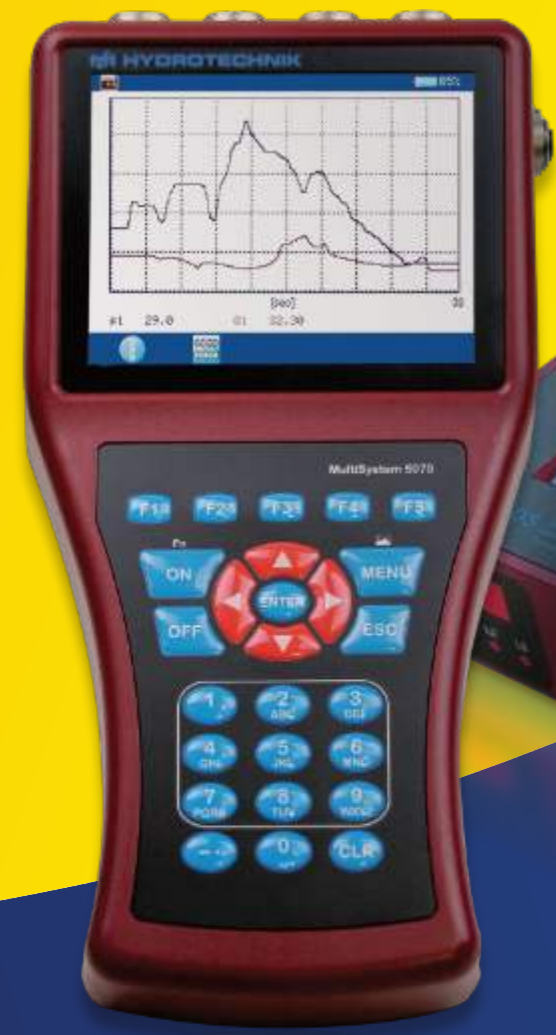
## Evaluation and control software

- HYDROcom 6 evaluation software
- HYDROlink 6 control & recording software
- HYDROcenter Firmware update software



# More sophisticated and more powerful...

# ...than ever before



## MultiHandy 2025

- 3 channel instrument with text backlit display
- 2 x selectable ISDS, mA, V or pulse inputs
- 1 x differential or power calculation channel
- Min & Max values
- Memory for five tests with up to 120,000 values per test
- Storage for 5 different test files
- Fast transmission via USB
- Sunlit viewable backlit LCD screen
- Compatible with any third-party sensors
- HYDROlink 6 Basic analysis & record software for PC

## MultiHandy 3020

- 4 channel instrument with text backlit display
- 2 analogue & 1 frequency channel (ISDS or Std.)
- 1 virtual calculation channels (delta p, power etc.)
- Min & Max values
- Storage for 14 different test files
- Memory for 1,000,000 (analogue), 330,000 (frequency) measurement per series
- Fast transmission via USB
- Record from selectable triggered events
- Sunlit viewable backlit LCD screen
- Supplied with HYDROcom 6 Advanced software

## MultiSystem 4070

- 15 channel instrument with bright colour display
- Graph or text display of measurements
- 3 or 4 analogue & 1 or 2 frequency channels (ISDS or Std)
- 10 virtual channels (differential, power etc & CANbus inputs)
- Digital I/O for external switching or instrument linking
- Min & Max readings
- Record from selectable triggered events
- 2GB internal SD card memory
- Storage for 100 different test files
- 2,000,000 values per series
- Supplied with HYDROcom 6 Advanced software

## MultiSystem 5070

- 42 Channel instrument with bright colour display
- Graph or text display of measurements
- 5" colour display
- 32 CAN, 6 or 8 analogue, 2 x 0.1 ms high speed & 2 frequency channels (ISDS or Std.)
- Reads most industry sensor outputs for true flexibility
- 2 CAN lines with independent Baud rates
- Digital I/O for external switching or instrument linking
- Min & Max readings
- Record from selectable triggered events
- 4GB internal SD card memory
- USB stick upload or download of tests & settings
- Space for 500 test files
- 6,000,000 measurements per test
- Faster download of tests to instrument memory to HYDROcom 6

## MultiControl & MultiSystem 8050

- 40 channel instrument with touch screen display or available in "blind" version for operation via PC
- Graph or text display of measurements
- 10 analogue & 2x 0.1 ms high speed analogue, 4 frequency channels (ISDS or Standard)
- 6,000,000 measurements per tests
- 2 inputs for voltage & current
- Analogue & Digital signal outputs for process control
- 6 or optional 14 virtual channels (CANbus signals, calculation & user-defined formulae)
- Min & Max readings
- Record from selectable triggered events
- Large internal memory
- Space for 200 test files
- Supplied with HYDROcom 6 Professional software
- Supplied with HYDROlink 6 Advanced software (MultiControl 8050)
- Digital I/O for external switching or instrument linking



### Universal connectivity as standard:-

0 or 4...20mA • 0...10V • ±10V • 1...5V • 2...10V • 0.5...4.5V • Frequency rate & totalising • CANopen • J1939 • Digital I/O • Free formulae • RS232 • USB • Bluetooth • Ethernet



## Pressure Sensors



Options from -1 up to 4000 bar with measuring accuracy of  $\pm 0.25\%$  FSD (ISDS)

Robust high-quality stainless steel construction with long life repeatability

Scanning rates up to 0.1ms (10kHz)

ISDS versions supplied with calibration certificates as standard



## Temperature Sensors



High-quality stainless steel sensors for accurate fluid temperature measurements

Hand tightens on to special Minimes 1620 temperature test point

Analogue output with or without ISDS

Also available in hand-held surface or immersion versions also with or without ISDS



## Displacement Sensors

Compact & robust dynamic string pot requiring no linear guidance

Standard measuring ranges up to 3000mm (higher on request)

Available with analogue output signals

Versions available with self-programmable 4...20mA output



## Vibration & Accelerometer Sensors

Triaxial vibration sensors for measuring g forces

Measuring ranges from  $\pm 2g$  up to  $\pm 200g$

Magnetic base vibration sensor for measuring frequency of vibrations

Miniature size & IP66 protection



## RPM Sensors



Infrared RPM sensors for shaft speed measurement via reflective foils to 10,000rpm

Available with analogue or frequency options

Magnetic Inductive pickups for gear wheel measurement

Available with frequency output



## Circular Gear & Turbine Flow Meters



Robust turbine meters with measuring ranges from 1...600l/min. 420 bar max.

High accuracy gear meters from 0.005...300l/min. 630 bar max.

Available in analogue or frequency signal output with or without ISDS

Accuracy up to  $\pm 0.4\%$  & supplied with calibration certificates

Pressure & temperature test points fitted as standard



## Load, Torque, Compression & Tension Sensors

Robust rotating torque measurement transducers from 2.5...500Nm

Load link tension & compression cell transducers from 1 to 500 tonnes

Low Profile IP67 robust button load cell transducers 0.5...20 tonnes

Standard signal outputs for simple connection to Hydrotechnik instruments



## Oil Contamination Particle Counting Sensors

Stylish Particle Monitor with ISO or SAE cleanliness code output

Internal memory up to 3000 readings

Easy connection to MultiSystem 4070, 5070 and 8050 for real-time cleanliness measurement in isolation or with other sensors at one time.

Connect to HYDROcom 6 software for PC monitoring & recording



## MultiXtend Extension Modules

MultiXtend extension modules enable Hydrotechnik dataloggers to measure direct Voltage, Current, K, J or PT100 thermocouples as well as extending the amount of channels for MultiSystem 4070, 5070 and MultiSystem/MultiControl 8050 instruments. MultiXtend units also enable up to four 5070 instruments to be connected at the same time for huge measurement possibilities. The range now also includes a new Bluetooth module for wireless transmission of recordings in real-time to a PC running HYDROcom 6 software.



**MultiXtend UI** for measurement of Voltage (up to  $\pm 60v$ ) or Current (up to  $\pm 4A$ ) with PWM, for use with any Hydrotechnik instrument

**MultiXtend f** - for additional one or four frequency channels to your Hydrotechnik measuring instruments

**MultiXtend A** - for additional four 0...20mA or 4...20mA channels for your 4070, 5070 or 8050 instruments

**MultiXtend Thermo** - for additional one or four extra thermocouple K, J or PT100 inputs to your Hydrotechnik measuring instruments

Connect unlimited numbers of MultiXtend CAN modules in series.

**MultiXtend Trigger** for connection of up to four 4070 or 5070 instruments allowing for synchronous recording of all instruments as one unit

**MultiXtend Bluetooth** for wireless transmission of all measured channels on your 4070 or 5070 to a laptop running HYDROcom 6. Transmission is almost instantaneous and distances are possible up to 200m apart

## Windows Evaluation & Control Software

HYDROcom 6 & HYDROlink 6 is the powerful analysis software provided with all Hydrotechnik datalogging instruments. A user-friendly environment-making test evaluation, online recording & presentation of data simpler and more powerful than ever before.

### HYDROcom 6

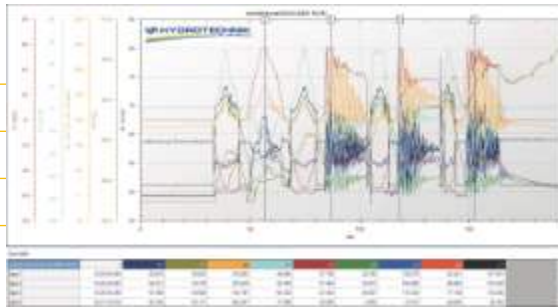
Transfer, import and export data

Evaluate, analyse and process test data

Transform data into graphs, tables & histograms

Create test reports, test protocols or quality control reports

HYDROcom 6 is available in basic, advanced or professional versions and is free with all Hydrotechnik measuring instrument



### HYDROlink 6

Allows for recording of tests via your PC with flexible display presentation options of required channels

Allows for analysis of saved Hydrotechnik test files even in Basic version

User-friendly single button operation or drag & drop functionality, perfect for test bays or end of line production

Advanced version allows for 2-way control of connected MultiSystem 4070, 5070 or 8050 up to 248 channels

### HYDROcenter

HYDROcenter allows download of associated Hydrotechnik instrument software, firmware, datasheets and manuals from one place. When connected to the internet, the user is also notified if installed Hydrotechnik software or connected Hydrotechnik instrument has an updated version available which can be downloaded and installed quickly and easily if chosen by the user to do so.



**Please see below details to contact us & obtain more information:**



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