MultiSystem 5060

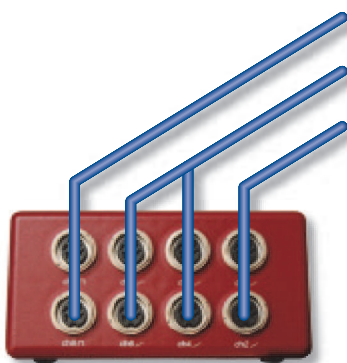|	
Channels	24
Analog sensors	6 (2x highspeed)
Frequency sensors	2
Measuring value memory	2 GB
Trigger inputs/outputs	1/1

... the mobile All-rounder

The perfect mobile measuring system with 24 channels, 2 GB data memory and powerful operation software. Use the graphical display to analyse meaurements during recording, or an USB stick to download measuring data in a fast and easy way.
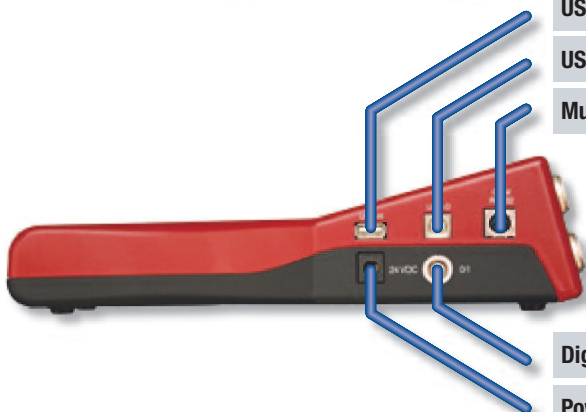

Connectivity

Sensors with frequency output (e.g. volume flow rate, rotational speed)

Sensors with analog output signal (e.g. pressure, temperature)

Highspeed sensors with analog output signal (e.g. for pressure peaks)

USB host device (e.g. printer)

USB device interface (e.g. PC connection, USB stick)

Multi-functional interface (e.g. CAN bus, RS 232)

Digital I/O interface (e.g. external trigger)

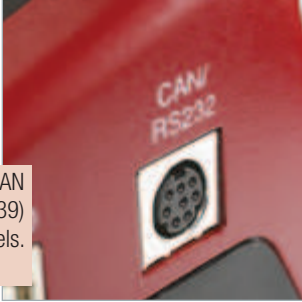**Power supply jack** (e.g. power pack, car power adaptor)

MultiSystem 5060

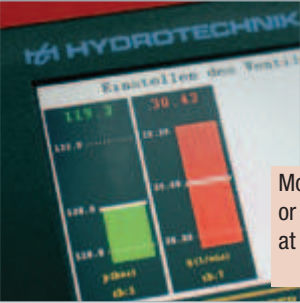## Open system architecture

Nearly each input signal from most different sources (analog, digital, frequency, CAN, ...).
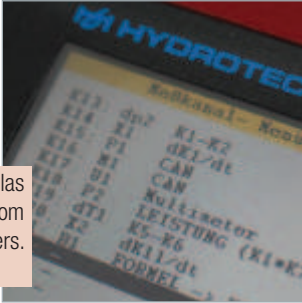
Full CAN bus functionality

Display and record signals from CAN bus systems (e.g. CANopen, J1939) on upt to 14 channels.
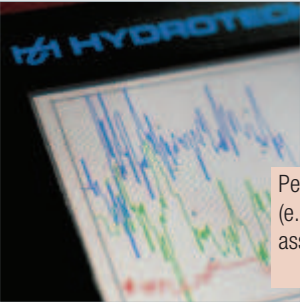
Programmable test sequences

Mobile test bench for serial testings or the standardized troubleshooting at complex systems.

14 special channels

Calculations with individual formulas and display of measured values from CAN busses or Multimeters.

Color display with graphical abilities

Perfect display of graphical elements (e.g. diagrams, images) with free assignment of arbitrary colors.
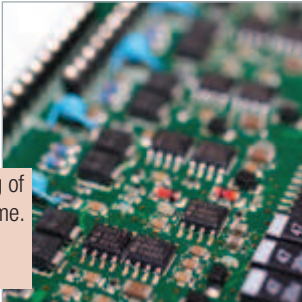
Networkability

Measuring system with 48 channels: full performance and synchornized measurement series for easy evaluation at the PC.

USB stick for data exchange

Easy transfer of measuring data or device configurations between measuring systems and PCs.

Unique hardware filter

Processing and smoothing of measuring data in real time.

MultiSystem 5060

Technical data

Measuring channels

Analog channels standard signals	6 (with Hydrotechnik ISDS)
signals	0/4 ... 20 mA, 0 ... 10 V, ±10 V, 0.5 ... 4.5 V, 1 ... 5 V, 2 ... 10 V
A/D converter	13 bit
measuring rate	10 kHz
error limit	± 0.15% FS
Measuring channels frequency	2 (with Hydrotechnik ISDS and direction detection)
signals	0.25 Hz ... 20 kHz (w.o.d.d.), 0.25 Hz ... 5 kHz (w.d.d.)
measuring rate	10 ms
error limit	± 0.02% of measured value
Electrical connection	6-pole jack, compatible with DIN 45 322, IEC 60130-9

Further channels

Digital input channels	1, galvanically separated
signal	3.5 ... 30 VDC (high)
Digital output channels	1
signal	NPN transistor output, max. 30 VDC / 10 mA
Special channels	14 (for CAN, MultiXtend or calculations)
MultiMeter connector	RS 232
CAN measuring rate / protocols	10 ms / CANopen, SAE J1939, a.o.
Calculations	Difference, sum, 1. derivation, hydraulic power, free definable formulas

Measuring value memory

Type	SD card, 2 GB
Max. number of measuring series	200
Max. number of values per series	2 million
Recording rate	0.1 ms ... 999 min
Individual scan rate	2 selectable, factor 1 ... 5,000
Recording time	1 s ... 999 h
Numer of triggers	2, linkable
Pretrigger	0 / 10 / 20 ... 100%

Equipment

Display	3.5" color TFT, QVGA
Interfaces	USB 2.0/FS device/host, RS232, CAN
Power supply	Power pack (24 VDC / 340 mA)
Batteries	NiMH 14.4 V / 2,150 mAh
Battery performance[1]	8 h
Sensor power supply	> 13 V (battery operation) / 18 V (power pack operation)
CAN power supply	~13 VDC / 80 mA (batteries), ~ 20 VDC / 80 mA (power pack)
USB host power supply	~ 5 VDC / 75 mA

Features

Casing (L x W x H) / Weight	ABS plastics (~ 240 x 130 x 60 mm) / ~ 1.1 kg
Protection type	IP 40
Operation / storage temperature	-10 ... 50 °C / -20 ... +50 °C
Relative humidity	0 ... 80% r.H. (not condensing)

1: 12 mA load at all measuring channels (equates to analog sensors 4 ... 20 mA, or turbine with frequency signal, each at 50 % load), new batteries, completely charged

MultiSystem 5060

Range of delivery • Accessories

Instruments and Measuring Sets

	Power pack with adaptors	USB cable 2.0 m	Data CD	MINIMESS® 1620 direct connector	Pressure sensor PR 300	Temperature sensor TE 100	Measuring turbine QT 100	Measuring cable 5.0 m	Transport case, plastics	
MultiSystem 5060	●	●	●	–	–	–	–	–	–	3160-00-70.00
MeasSet p/p	●	●	●	2x	2x	–	–	2x	●	5060C-pp-xx[1]-xx[1]
MeasSet p/p/T	●	●	●	2x	2x	●	–	3x	●	5060C-ppT-xx[1]-xx[1]
MeasSet p/p/T/Q	●	●	●	2x	2x	●	●	4x	●	5060C-ppTQ-xx[1]-xx[1]-yy[2]

1: xx is measuring range code, see order data pressure sensor HySense© PR 3xx
2: yy is measuring range code, see order data volume flow rate sensor HySense© QT 1xx

PC software

Task	Recom. software	Delivery	Order number
Firmware update	**HYDRO**boot	yes	8874-00-06.01
Instrument remote configuration	**HYDRO**link	no	8874-00-07.01
Instrument remote operation			
Execute online measurements	**HYDRO**com	yes[1]	8874-13-01.02
Download measurement data			
Evaluate and present measurement data			
Program measurement procedures	**HYDRO**gen	no	8874-01-01.55
Execute measurement procedures	**HYDRO**run	yes[2][3]	8874-01-01.55

1: 3 licenses **HYDRO**com Full
2: only for procedures in the instrument; PC software not contained
3: a license code is required to load new procedures into the instrument

Accessories

Power pack	110/240 VAC, 50/60 Hz – 24 VDC/630 mA	8812-20-02.00
Table-top power pack	100/240 VAC, 50/60 Hz – 24 VDC/630 mA	8812-02-01.00
Car power supply	12 VDC – 24 VDC; cable length 5.0 m	8824-64-05.00
Power cord	US-american norm	8824-G6-02.00
Battery pack	NiMH, 2,150 mAh	8873-07-01.00
SD memory card	2 GB	8874-20-01.05
USB cable	Plug USB-A/-B; highspeed USB 2.0; 2.0 m	8824-F4-02.00
Connection cable	Parallel link 2x MS 5060	8824-F2-00.50
	External trigger, open cable ends	8824-D8-01.00
	Trigger cable for impulse counting	8824-R3-00.35
Transport cases	Plastic, black, with turbine box	3160-00-70.01
	Aluminium, red, without turbine box	3160-00-70.02
	Aluminium, red, with turbine box	3160-00-70.03
Protective bag	Nylon, black, front transparent film	8875-01-07.00
Calibration	all electrical input channels	3199-30-01.06
Service package	Basic	3199-30-00.03
	Plus	3199-30-01.06
	Professional	3199-30-02.06

Additional accessories (cables, Minimess© products, a.s.o.) in the section „Accessories"