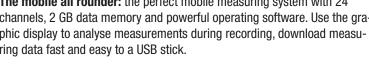# MultiSystem 5060 *Plus*

The mobile all rounder: the perfect mobile measuring system with 24 channels, 2 GB data memory and powerful operating software. Use the graphic display to analyse measurements during recording, download measuring data fast and easy to a USB stick.

✓ **For all measuring tasks:**
flexible hand held instrument with huge functionality

✓ **Large display:**
impressive graphical performance with high resolution

✓ **Live analysis of measuring data:**
descriptive line diagrams with zoom function

✓ **Robust construction:**
shock-resistant casing with rigid connectors

✓ **Highest flexibility:**
24 channels for freely definable measurements

MultiSystem 5060 *Plus* Technical data

Inputs, outputs and channels

Analog input channels	4x standard, 2x HighSpeed (for sensors with or without Hydrotechnik ISDS)
Signals	0/4 ... 20 mA • 0/1/2 ... 10 V • 0.5 ... 4.5 V • ± 10 V
A/D converter	13 bit
Meas. rate HighSpeed	10,000 values per second
Meas. rate standard	1,000 values per second
Error limits	± 0.15 % FS
Frequency input channels	2x (for sensors with or without Hydrotechnik ISDS)
Signals	0.25 Hz ... 20 kHz (w.o.D.) • 0.25 Hz ... 5 kHz (w.D.)
Measuring rate	10 ns
Error limits	± 0.02 % MV
Digital input	1x, galvanically separated, 3.5 ... 30 VDC
Measuring rate	1,000 values per second
Digital output	1x
max. load	Ub / 10 mA
reaction time	≤ 1 ms
Electrical meas. connector	6 pole jack, compatible to DIN 45 322, IEC 60130-9
Special channels	14x
Calculations	difference, sum, hydraulic power, CAN, ...
Free definable formulas	yes
CAN measuring rate	100 values per second
CAN protocols	CANopen, SAE J1939, ...
Filter functions	Hardware- (low-pass) and several software filters

Data memory

Type	Micro SD card 2GB
Measuring series	200
Values per measuring series	2,000,000
Recording rate	1 ms ... 999 min. (settable)
Recording time	1 s ... 999 h (settable)
Trigger	2x, linkable (bigger, smaller, falling/rising edge)
Pretrigger	0 / 10 / 20 / ... 100 %

MultiSystem 5060 *Plus* Technical data

Equipment

Interfaces	USB 2.0 device • USB 2.0 host • RS 232
Battery power supply	NiMH batteries, 14.4 VDC, 2,150 mAh
Battery operation	max. 8 h
Mains operation power supply	12 ... 30 VDC
Sensor power supply	13 (battery operation) ... 22 (mains operation) VDC, 100 mA
CAN / MX power supply	Vs+ VDC, 180 ... 200 mA

Qualities

Casing	Plastic PC + ABS + 20GF
Dimensions	~ 270 x 140 x 69 mm (L x W x H)
Weight	~ 1,277 g
Protection type	IP 40
Temperature – operation	-10 ... +50 °C @ max. 80 % r.h., not condensing
– storage	-20 ... +50 °C

MultiSystem 5060 *Plus* Order data

Single unit

Range of delivery	Order Nº
MultiSystem 5060 Plus • Power pack • USB cable • Data CD • **HYDRO***com* 6 Full, 3 licenses	3160-00-79.00

Measuring sets

PR 400 · TE 100 · QT 100

Pressure measurement	Order Nº
Version C • All components of the single unit • 2x HySense® PR 400 pressure sensor • 2x Minimess® direct connector 1620 • 2x measuring cable standard, 5.0 m • Plastic case, black	5060C-pp-xx[1]-xx[1] 1: see below for measuring range codes

MultiSystem 5060 *Plus* Order data

Measuring sets

Pressure and temperature measurement	Order Nº
Version C • All components of the single unit • 2x HySense® PR 400 pressure sensor • 1x HySense® TE 100 temperature sensor • 2x Minimess® direct connector 1620 • 3x measuring cables standard, 5.0 m • Plastic case, black	5060C-ppT-xx[1]-xx[1] 1: see below for measuring range codes

Measure pressure, temperature and volume flow rate	Order Nº
Version C • All components of the single unit • 2x HySense® PR 400 pressure sensor • 2x Minimess® direct connector 1620 • 1x HySense® TE 100 temperature sensor • 1x HySense® QT 100 volume flow rate sensor • 4x measuring cables standard, 5.0 m • Plastic case, black	5060C-ppTQ-xx[1]-xx[1]-yy[2] 1: see below for measuring range codes 2: see below for measuring range codes

Measuring ranges PR 400	Code	Measuring ranges QT 100	Code
0 ... 600 bar | 0 ... 8,700 psi	18	16 ... 600 l/min | 4.25 ... 158.5 gpm	72
0 ... 400 bar | 0 ... 5,800 psi	15	9 ... 300 l/min | 2.35 ... 79.25 gpm	71
0 ... 200 bar | 0 ... 2,900 psi	10	2 ... 75 l/min | 0.5 ... 19.8 gpm	70
0 ... 60 bar | 0 ... 870 psi	21	1 ... 10 l/min | 0.26 ... 2.6 gpm	01

Measuring set 5060C-ppTQ with sensors for pressure, temperature and volume flow rate, Minimess® connectors and accessories; the image shows optional components, like additional sensors, Patrick the particle counter and a MultiXtend module.

MultiSystem 5060 *Plus* Accessories

Power supply

Power pack (plug version), 115 ... 230 VAC	8812-20-02.00
Power pack (table version), 115 ... 230 VAC	8812-02-01.00
Car connection cable, 12 VDC, 5.00 m	8824-64-05.00
Batteries	8873-07-01.00

Cables

Measuring cables are contained in the section „Accessories"

CAN connection cable, plug – jack M12 x 1 (5 pole), for MultiXtend, 5.0 m		8824-R7-05.00
CAN connection cable, plug M12 x 1 (8 pole), open cable ends, 1.5 m		8824-R9-01.50
Multimeter connection cable, M12 x 1, 2.0 m		8824-R6-02.00
HYDROboot connection cable, 2.0 m		8824-R5-02.00
Patrick connection cable plug – jack M12 x 1 (8 pole) Y distributor required (see Patrick accessories)	2.5 m	8824-T2-02.50
	5.0 m	8824-T2-05.00
	10.0 m	8824-T2-10.00
Patrick connection cable plug – plug M12 x 1 (8 pol), use without Y distributor, power supply from measuring instrument	2.5 m	8824-T6-02.50
	5.0 m	8824-T6-05.00
	10.0 m	8824-T6-10.00
USB cable, USB-A – USB-B, 2.0 m		8824-F4-02.00

Others

DIN rail mounting set, clip + rail + screws	8854-00-00.02
Velcro strip mounting set, 5 pieces	8840-00-00.13
Neck strap set, with fixing	8854-00-00.01
Data CD, software and operating instructions manual	8874-16-00.01
Plastic case, black, with compartments for turbine, Patrick, MultiXtend	8859-02-02.03
Plastic case, red, with foam inlays	8854-15-00.14K
Leather bag (art.), with see-through panel	8875-01-07.00
HYDROcom 6, program version Professional, 3 licenses	8874-19-01.01
HYDROcom 6, program version Full, 3 licenses	8874-19-01.02

Calibration and Service

Calibration, single channels or as measuring chain with sensors (option)	3199-12-00.11
Service package Basic	3199-30-00.03
Service package Plus	3199-30-01.06
Service package Professional	3199-30-02.06