

# 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 measurands

# 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 • $\pm 10$ V               |
| A/D converter              | 13 bit  |
| Meas. rate HighSpeed       | 10,000 values per second  |
| Meas. rate standard        | 1,000 values per second   |
| Error limits               | $\pm 0.15$ % 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               | $\pm 0.02$ % MV   |
| Digital input              | 1x, galvanically separated, 3.5 ... 30 VDC                                |
| Measuring rate             | 1,000 values per second   |
| Digital output             | 1x  |
| max. load                  | $U_b / 10$ mA   |
| reaction time              | $\leq 1$ ms   |
| Elektrical 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 N°      |
|--|---------------|
| MultiSystem 5060 Plus <ul style="list-style-type: none"> <li>• Power pack</li> <li>• USB cable</li> <li>• Data CD</li> <li>• <b>HYDRocom</b> 6 Full, 3 licenses</li> </ul> | 3160-00-79.00 |

## Measuring sets



| Pressure measurement   | Order N°   |
|--|--|
| <b>Version C</b> <ul style="list-style-type: none"> <li>• All components of the single unit</li> <li>• 2x HySense® PR 400 pressure sensor</li> <li>• 2x Minimes® direct connector 1620</li> <li>• 2x measuring cable standard, 5.0 m</li> <li>• Plastic case, black</li> </ul> | 5060C-pp-xx <sup>1</sup> -xx <sup>1</sup><br><small>1: see below for measuring range codes</small> |

# MultiSystem 5060 *Plus* Order data

## Measuring sets

| Pressure and temperature measurement   | Order N°  |
|--|---|
| <b>Version C</b> <ul style="list-style-type: none"> <li>• All components of the single unit</li> <li>• 2x HySense® PR 400 pressure sensor</li> <li>• 1x HySense® TE 100 temperature sensor</li> <li>• 2x Minimes® direct connector 1620</li> <li>• 3x measuring cables standard, 5.0 m</li> <li>• Plastic case, black</li> </ul> | 5060C-ppT-xx <sup>1</sup> -xx <sup>1</sup><br><br><small>1: see below for measuring range codes</small> |

| Measure pressure, temperature and volume flow rate   | Order N°   |
|--|--|
| <b>Version C</b> <ul style="list-style-type: none"> <li>• All components of the single unit</li> <li>• 2x HySense® PR 400 pressure sensor</li> <li>• 2x Minimes® direct connector 1620</li> <li>• 1x HySense® TE 100 temperature sensor</li> <li>• 1x HySense® QT 100 volume flow rate sensor</li> <li>• 4x measuring cables standard, 5.0 m</li> <li>• Plastic case, black</li> </ul> | 5060C-ppTQ-xx <sup>1</sup> -xx <sup>1</sup> -yy <sup>2</sup><br><br><small>1: see below for measuring range codes</small><br><small>2: see below for measuring range codes</small> |

| 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, Minimes® 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        |
| <b>HYDROboot</b> connection cable, 2.0 m  | 8824-R5-02.00        |
| Patrick connection cable<br>plug – jack M12 x 1 (8 pole)<br>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<br>plug – plug M12 x 1 (8 pol),<br>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

|   |                |
|---|----------------|
| Cap 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  |
| <b>HYDROcom</b> 6, program version Professional, 3 licenses             | 8874-19-01.01  |
| <b>HYDROcom</b> 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 |