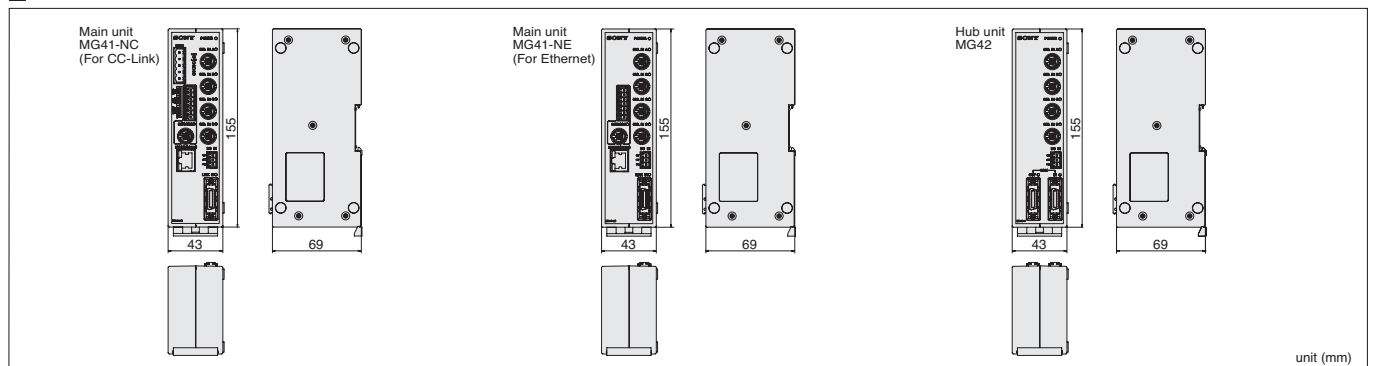


## Specifications

| Item  | Conditions   | Description   |          |          |  | Remarks  |
|---|--|---|----------|----------|--|--|
| No. of connectable measuring units                              | Entire system  | 1 to 100 units (Connection disabled after connection of 101st unit.)  |          |          |  | Up to 24 connected MG42 hub units  |
|   | MG41 main unit   | 0 to 4 units  |          |          |  |  |
|   | MG42 hub unit  |   |          |          |  |  |
| Connectable measuring units                                     |  | DK800A/DK 800B series, DK10, DK25, DK50, DK100, DK110, DK155, DK205   |          |          |  |  |
| Connection cable length   |  | Between MG41 main unit and MG42 hub unit, between MG42 hub unit and MG42 hub unit: 0.5 m, 1 m, 2 m, 5 m, 10 m<br>Total cable length from MG41 main unit: Maximum 30 m (Maximum current: 4 A or less)  |          |          |  |  |
| Resolution  | Settable output data resolution and display resolution |   |          |          |  |  |
|   | Measuring unit resolution (input resolution)           | 0.1 μm  | 0.5 μm   | 1 μm     | 5 μm   | 10 μm  |
| Measuring unit data import capacity                             | 10 Mbps data transfer                                  | Maximum 10,000 data/s (when 100 axes are connected)   |          |          |  | The data for one axis is counted as one data.  |
| Data format   |  | Signed 7-digit fixed data with decimal (zero suppression for higher digits)   |          |          |  |  |
| Peak-hold function  |  | Calculation of maximum value, minimum value, and peak-to-peak value for each axis (including pause, latch, and start functions)   |          |          |  |  |
|   |  | Peak value is not updated during pause.   |          |          |  |  |
|   |  | Output and display data are not updated during latching (internal data is updated)  |          |          |  |  |
| Output data   | Single axis  | Current value, maximum value, minimum value, and peak-to-peak value for each axis   |          |          |  |  |
|   | Addition and subtraction                               | Current value, maximum value, minimum value, and peak-to-peak value for the two-axis addition/subtraction axis  |          |          |  | Single axis calculation of an addition/subtraction axis is not possible (for preventing inconsistencies in calculation). |
| Comparator function   |  | Data for each axis (single axis, addition/subtraction axis) is compared and measured, and the comparator results are output. (Comparator during latch is also latched.)   |          |          |  |  |
| Comparator setting values                                       | Comparator setting values                              | 2 values  | 4 values | 8 values | 16 values                                    |  |
|   | No. of setting value groups                            | 16 groups   | 8 groups | 4 groups | 2 groups                                     |  |
| Ethernet  |  | 100Base-T (compliant with IEEE 802.3) 100 Mbps/10 Mbps/1 Mbps (Auto-negotiation)<br>Command input, data output, and parameter setting are possible.   |          |          |  |  |
| Reset function  |  | Current value for each axis is reset (by command).  |          |          |  |  |
| Preset function   |  | Value is preset to the current value of each axis (by command).   |          |          |  |  |
| Datum point setting function                                    |  | Datum point of each axis can be set (by command).   |          |          |  |  |
| Reference point function  |  | Reference point can be used to relocate the datum point of each axis (by command).  |          |          |  | When master calibration function is not used   |
| Master calibration function                                     |  | Reference master can be used to perform master calibration for each axis (by command).  |          |          |  | Addition/subtraction axis cannot be used.  |
| Measuring unit product information                              |  | The product information of the connected measuring unit can be acquired.  |          |          |  |  |
| Command/setting enabled or disabled for each communication line | Command  |   | Ethernet | Fieldbus |  |  |
|   |  | Reset function  | ○        | ○        |  |  |
|   |  | Preset function   | ○        | ○        |  |  |
|   |  | Datum point setting function  | ○        | ○        |  |  |
|   |  | Reference point function  | ○        | ○        | When master calibration function is not used |  |
|   |  | Master calibration function   | ○        | ○        |  |  |
|   |  | Comparator value setting  | ○        | ○        |  |  |
|   |  | Comparator group number setting   | ○        | ○        |  |  |
|   |  | Start   | ○        | ○        |  |  |
|   |  | Pause   | ○        | ○        |  |  |
|   | Data output  | Latch   | ○        | ○        |  |  |
|   |  | Current value/Peak value (All axes)   | ○        | ×        |  |  |
|   |  | Current value/Peak value (each unit)  | ○        | ○        |  |  |
|   |  | Comparator result   | ○        | ○        |  |  |
|   |  | Alarm (Communication/Measuring unit)  | ○        | ○        |  |  |
|   | Settings   | Soft ware version   | ○        | ○        |  |  |
|   |  | Measuring unit product information  | ○        | ○        |  |  |
|   |  | Input resolution  | ○        | ○        |  |  |
|   |  | Display and output resolution   | ○        | ○        |  |  |
|   |  | Axis addition   | ○        | ○        |  |  |
| Comparator mode (2, 4, 8, or 16 values in 1 group)              | ○  | ○   |          |          |  |  |
| Supply voltage  | Terminal input   | DC 12 to 24 V (11 to 26.4 V)  |          |          |  | Use a power supply with a current that is 4 A or higher. (Recommended: +24 V) (for every six MG42 hub units)             |
| Power consumption   | Note the connection conditions.                        | System total: Max. current 4 A<br>When the maximum current is exceeded, the connection can be enabled by providing a power supply to the MG42 hub units that come later in the connection.<br><Details of power consumption for each unit> MG41 main unit : 4 W, MG42 hub unit : 1 W/unit, Measuring unit supply : 1 W/unit |          |          |  |  |
| Operating temperature and humidity range                        |  | 0 to +50 °C (no condensation)   |          |          |  |  |
| Storage temperature and humidity range                          |  | -10 to +60 °C (20 to 90 % RH)   |          |          |  |  |
| Mass  |  | MG41 : 300 g, MG42 : 250 g  |          |          |  |  |

## External Dimensions



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