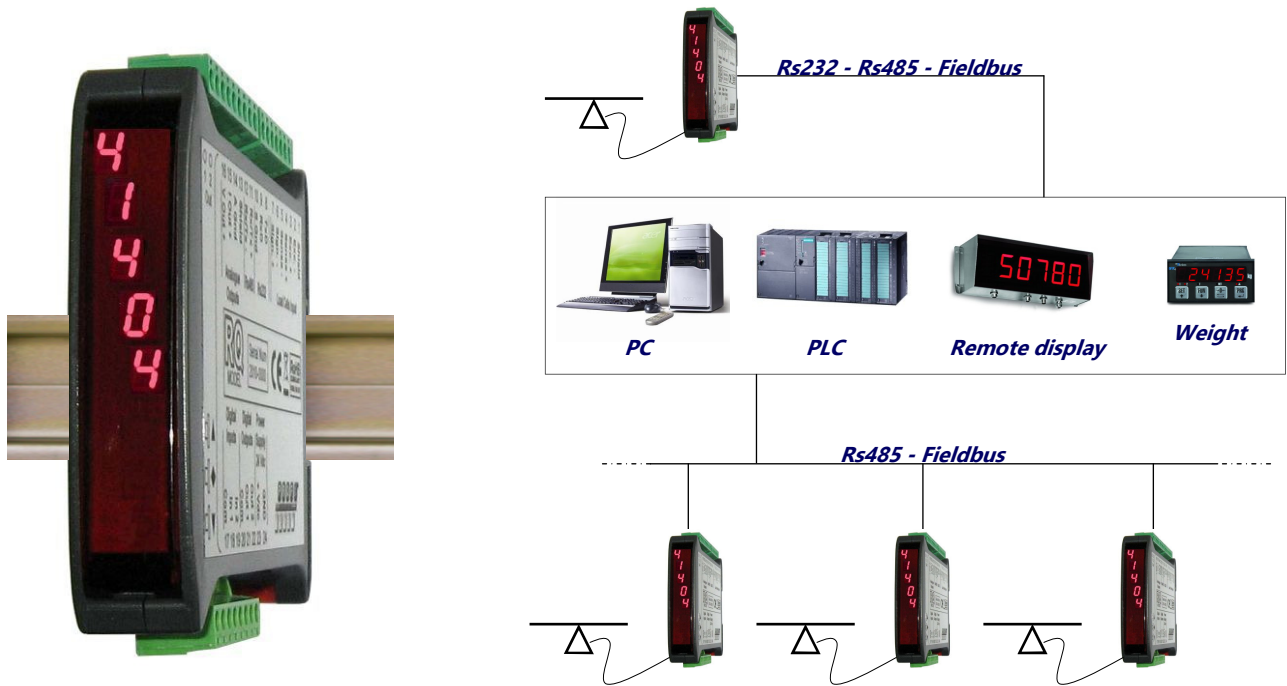
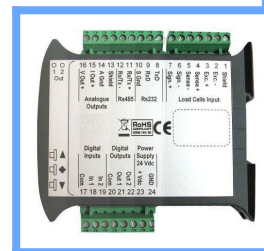


# WK3



## High performance digital weight transmitter

- ★ *Digital weight transmitter for strain gauge based sensors*
- ★ *Ultra compact size (just 23 mm. thick) and 5 digit red LEDs display*
- ★ *16 bit analog output, voltage or current selectable*
- ★ *2nd optional and independent analog output*
- ★ *2 independent serial ports, Rs232 and Rs485*
- ★ *ASCII and Modbus RTU communication protocols*
- ★ *Optional embedded Profibus-DP or DeviceNet interface*
- ★ *2 opto-isolated logic inputs and 2 relay outputs*
- ★ *2 status LEDs*
- ★ *Full parameters programming via front panel keys*
- ★ *Dead weight calibration or theoretical (based on sensors' data sheets) calibration procedures*



# WK3

## TECHNICAL FEATURES

|  |  |                                     |
|--|--|-------------------------------------|
| <b>Power supply</b>                            | 24 Vdc $\pm$ 10% protected against reversed polarity<br>Protection with restorable fuse  |                                     |
| <b>Power consumption</b>                       | 2 W (3 W with fieldbus option)   |                                     |
| <b>Isolation class / Installation category</b> | Class II / Category II   |                                     |
| <b>Operating temperature</b>                   | -10 to +50 °C (0 - 85% RH, non-condensing)   |                                     |
| <b>Storage temperature</b>                     | -20 to +60 °C  |                                     |
| <b>Display</b>                                 | Numeric, 5 red LED digit, 7 segments (7 mm high)   |                                     |
| <b>Status LEDs</b>                             | 2 LED's $\varnothing$ 3 mm (used for relay outputs status)   |                                     |
| <b>Keyboard</b>                                | 3 mechanical keys  |                                     |
| <b>Overall dimensions</b>                      | 23 x 110 x 120 mm (l x h x d)<br>35 x 110 x 120 mm (l x h x d) with Profibus or DeviceNet options  |                                     |
| <b>Mounting</b>                                | DIN rail (EN 60715)  |                                     |
| <b>Enclosure</b>                               | Blend PC/ABS self-extinguishing  |                                     |
| <b>Connections</b>                             | Pull-out screw terminals, pitch 5,08 mm<br>9 pin female Sub-D connector for Profibus<br>5 pin pull-out terminal block, pitch 5,08 mm for DeviceNet |                                     |
| <b>Load cell excitation</b>                    | 4 Vdc - 50 mA (max 4 x 350 $\Omega$ load cells)  |                                     |
| <b>Linearity</b>                               | < 0,01% of F.S.  |                                     |
| <b>Thermal drift</b>                           | < 0,001% of F.S. / °C  |                                     |
| <b>Internal A/D resolution</b>                 | 24 bit   |                                     |
| <b>Measurement range</b>                       | -2,6 mV/V to +2,6 mV/V   |                                     |
| <b>Digital filter</b>                          | 0,1 Hz to 50 Hz, selectable  |                                     |
| <b>Decimal digits</b>                          | 0 to 3 decimal digits  |                                     |
| <b>Zero and F.S. calibration</b>               | Manual (with sample weight) or Automatic (based on sensors' data sheet)  |                                     |
| <b>L.C. Fail safe</b>                          | Always present   |                                     |
| <b>Serial ports</b>                            | Rs232 half duplex<br>Rs485 half duplex   |                                     |
| <b>Baud rate</b>                               | Up to 115 kbps (default 9600 bps)  |                                     |
| <b>Serial protocols</b>                        | ASCII, Modbus RTU  |                                     |
| <b>Optional fieldbus</b>                       | Profibus-DP or DeviceNet (embedded)  |                                     |
| <b>Logic outputs</b>                           | 2 opto-isolated relay outputs (dry contact) - Contact rate: 24 Vdc, 1A   |                                     |
| <b>Logic inputs</b>                            | 2 opto-isolated inputs 24 Vdc PNP (external power supply)  |                                     |
| <b>2 independent analog outputs</b>            | Voltage: $\pm$ 10V / $\pm$ 5V  | Current: 0 $\pm$ 20 / 4 $\pm$ 20 mA |
| <b>Resolution</b>                              | 16 bit   | 16 bit                              |
| <b>Calibration</b>                             | Digital, via keyboard  | Digital, via keyboard               |
| <b>Impedance</b>                               | Min. 10 K $\Omega$   | Max. 300 $\Omega$                   |
| <b>Linearity</b>                               | 0,03% of F.S.  | 0,03% of F.S.                       |
| <b>Thermal drift</b>                           | 0,002 % of F.S. / °C   | 0,002 % of F.S. / °C                |
| <b>Conformity to Standards</b>                 | EN 61000-6-2, EN 61000-6-3 for EMC<br>EN61010-1 for Electrical Safety  |                                     |

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