

Analog and digital inputs/outputs in one module

Mixed input/output slave

- 2 analog inputs 4 ... 20 mA
- 1 binary output
- 1 pulse input
- 1 status input

Protection category IP65



Article no. BWU1931: Analog and digital inputs/outputs in one module

The analog module has 2 analog inputs 4 ... 20 mA, 1 binary output, 1 pulse input and 1 status input.

The conversion of the measured value and the data transmission via AS-i occurs according to AS-i Profile 7.5.5. Inputs are completely galvanically isolated. The ground of the binary output is connected to 0 V

ext. Analog sensors can be connected via cage clamp terminals. The sensor-interfaces are supplied by external voltage (according to PELV) via the black ribbon cable, 1 A max. The external 24 V supply voltage must be connected. The resolution of the analog data is 16 bit.

| Article no. | BWU1931 |
|---|--|
| Analog inputs | 2 inputs 4 ... 20 mA/ 50 W |
| Binary outputs | 1 output 24 V/ 0,5 A |
| Digital inputs | 1 pulse input 0 ... 1kHz, treshold value 13 V 1 status input 0 ... 10 Hz, treshold value 13 V |
| Resolution | 16 bit |
| Max. current per analog input | 40 mA |
| Range of value | 40 mA |
| Transformation speed | 120 ms for analog inputs |
| AS-i Profile | 7.5.5 |
| ID code | 5 |
| ID1 code | F |
| ID2 code | 5 |
| IO code | 7 |
| Displays | |
| LED green (analog 1) | analog signal 1 |
| LED green (analog 2) | analog signal 2 |
| LED green (binary output) | binary signal |
| LED green (pulse input) | pulse signal |
| LED green (status input) | status signal |
| LED green (Pwr) | AS-i voltage |
| LED red (Fault) | AS-i communication error, peripheral fault |
| LED green (Aux) | ext. power on (mandatory) |
| Operating current | < 80 mA |
| Operating voltage | 30 V (20 ... 31.6 V) |
| Voltage of insulation | ≥ 500 V |
| EMC directions | EN 61 000-6-2 EN 61 000-6-4 |
| Ambient operating temperature | 0°C ... +70°C |
| Storage temperature | -25°C ... +85°C |
| Pollution degree | 2 |
| Housing | housing for DIN-rail mounting |
| Dimensions (L / W / H in mm) | 90 / 80 / 70 |
| Protection category (EN 60529) | housing IP65 |
| Tolerable loading referring to humidity | according to EN 61131-2 |

Programming:

(Bit-settings of AS-i parameters)

Bit P0:

- 1: counter in operation
- 0: counter set to "0"

Bit P1:

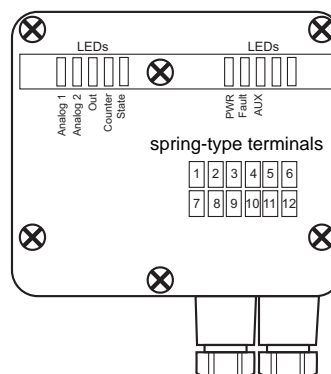
- 1: upward counting
- 0: downward counting

Bit P2:

- 1: Peripheral fault is indicated
- 0: Peripheral fault is *not* indicated

Bit P3:

- 1: scaling (analog values) 4000 ... 20000 dec.
- 0: scaling (analog values) 0 ... 27648 dec. (Siemens format)



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|-----|-------------------------|
| Bit | Function |
| D0 | input status / output 1 |
| D1 | input pulse / n.a. |
| D2 | n.a. / n.a. |
| D3 | n.a. / n.a. |
| Bit | Function |
| A0 | input 1 |
| A1 | input 2 |
| A2 | pulse count |
| A3 | n.a. |

Connections:

| | | | |
|---|---------------|----|---------------|
| 1 | 24 V ext. | 7 | 0 V ext. |
| 2 | Sig. + Ch 1 | 8 | Sig. - Ch 1 |
| 3 | Sig. + Ch 2 | 9 | Sig. - Ch 2 |
| 4 | Sig. + Pulse | 10 | Sig. - Pulse |
| 5 | Sig. + Status | 11 | Sig. - Status |
| 6 | Sig. + Out | 12 | 0 V Out |