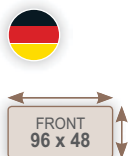


Universal Counter



HIGHLIGHTS:

- Counting, length measurement, metering, positioning
- 2 digital input channels for summation- and subtraction
- Integrated transmitter supply
- Max. 4 preselect outputs, relay SPDT or transistor

**UZ 9648**

Universal Counter

**Application:**

The universal counter UZ 9648 has been designed for field application in process control and automation. Parameters for operation mode can be programmed. The counter can be used wherever quantity processes should be measured, displayed and monitored.

**Specifications:**

**Power supply:**

**Supply voltage:** 230 V AC  $\pm 10\%$ ; 115 V AC  $\pm 10\%$ ;  
24 V AC  $\pm 10\%$  or 24 V DC  $\pm 15\%$

**Power consumption:** max. 3.5 VA, with analog output 5 VA

**Working temperature:** -10 ... +55 °C

**CE- conformity:** EN 55022, EN 60555, IEC 61000-4-3/4/5/11/13

**Input:**

**PNP sensor:**  $R_i = 6.3 \text{ k}\Omega$   
level:  $< 4 \text{ V}$  low;  $> 8.5 \text{ V}$  high;  
hysteresis  $> 2.5 \text{ V}$ ; max. 35 V DC

**Namur sensor:**  $R_i$  approx.  $1 \text{ k}\Omega$  ( $< 4 \text{ mA}$ )  
level:  $< 1 \text{ mA}$  low;  $> 2.2 \text{ mA}$  high;  
hysteresis  $> 0.5 \text{ mA}$ ; max. 35 V DC

**Pulse frequency:** input A or B = 15 kHz,  
A and B together = 6 kHz,  
contact = 30 Hz debounced,  
2-channel rotary encoder = 8 kHz

**Counting loss:** 100  $\mu\text{s}$  at reset;  
20 ms changing of preselect value

**Min. pulse width:** electronic 50  $\mu\text{s}$ , contact 5 ms

**External reset:** reset impulse  $\geq 10 \text{ ms}$

**Transmitter supply:** 8 V DC (Namur), 24 V DC (PNP),  $R_i$  approx. 150  $\Omega$ ,  
max. 50 mA (25 mA with 4 relay outputs)

**Display**

**Indicating range:** -99999 ... +999999 Digit with leading zero suppression

**Additional display:** LED 2-digit red, 7 mm  
(parameter - and output indicator)

**Output:**

**Relay:** SPDT  $< 250 \text{ V AC}$   $< 250 \text{ VA}$   $< 2 \text{ A}$ ,  
 $< 300 \text{ V DC}$   $< 50 \text{ W}$   $< 2 \text{ A}$

**Transistor:** max. 35 V AC/DC, 100 mA,  
with short circuit protection

**Analog output:** 0/4 ... 20 mA burden  $\leq 500 \Omega$ ; 0/2 ... 10 V,  
burden  $> 500 \Omega$ , with isolation

**- Accuracy:** 0.1 %; TK 0.01 %/K

**Housing:** panel case DIN 96 x 48 mm, material PA6-GF; UL94V-0

**Dimensions:** front 96 x 48 mm, mounting depth 100 mm

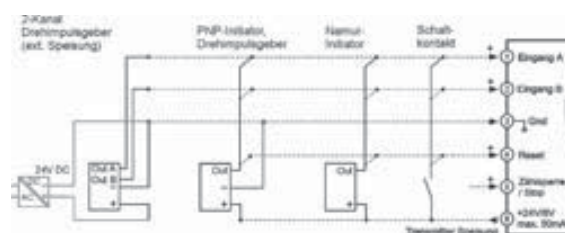
**Weight:** max. 390 g

**Connection:** clamp terminals, 0.08 ... 1.5 mm<sup>2</sup>, AWG 28 ... AWG 14

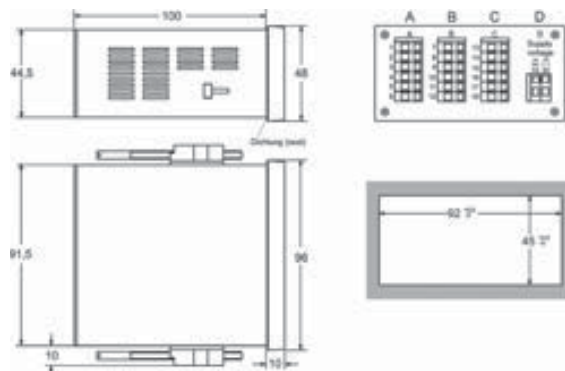
**Protection class:** front IP65, terminals IP20 acc. to BGV A3

**Scope of supply:** Device, manual

**Connection:**



**Dimensions:**



UZ9648- [1] - [2] - [3] - [4] - [5] - [6] - [7]

| 1. Terminal strip A   |   |
|---|---|
| 1   | 2 configurable count inputs, display conversion, wide range of count functions, integrated transmitter supply 24 V max. 50 mA |
| 2. Terminal strip B   |   |
| 00  | not installed   |
| 2R  | 2 relay outputs   |
| 2T  | 2 electronic outputs  |
| 3. Terminal strip C   |   |
| 00  | not installed   |
| 2R  | 2 relay outputs   |
| 2T  | 2 electronic outputs  |
| AO  | analog output 0/4 ... 20 mA, 0/2 ... 10 V DC  |
| 4. Terminal strip D; supply voltage                           |   |
| 0   | 230 V AC $\pm 10\%$ 50-60 Hz  |
| 1   | 115 V AC $\pm 10\%$ 50-60 Hz  |
| 4   | 24 V AC $\pm 10\%$ 50-60 Hz   |
| 5   | 24 V DC $\pm 15\%$  |
| 5. Options  |   |
| 00  | without option  |
| 6. Unit (appears in the unit field)                           |   |
| 7. Additional text placed above the display (90 x 3 mm W x H) |   |

Handheld instrument  
Display / Controller  
Logger- / Bus systems  
Transmitter  
Temperature probe  
Simulators  
Alarm / Protection, Level