

## ■ Programmable Digital Panel Meter Model UM 3012

### ***Highlights***

- Signal Input 0 - 10 V and 0/4 - 20 mA
- DIN Housing 96 x 48 mm
- LED Display 14 mm
- Switchboard- or Mosaic System Mounting
- Plug-In Screw Terminal
- Isolated Power Supply
- Optocouple Output

### **UM 3012**

- Potentiometer 1k...10k
- Accuracy 0,1% ±1 digit
- max. resolution 4000 digit

### **Software functions**

- Scaling-factor
- Userdefined linearization up to 9 points
- Adjustable digital filter
- Peak detection
- Decimal point
- Last digit in 1, 2, 5 or 10 steps
- Display test

### **Digital input channels**

The instrument is provided with three digital input channels. The digital input channels are low active. The digital inputs are used for the following functions:

- Programming
- Display test
- Reset of peak detection
- Display of limiting value

### **Optocouple output**

The instrument is provided with a optocouple output. Alternatively the optocouple output can be programmed for the following functions:

#### **1. Serial output**

Continually measured value transmitting at ASCII-Code with the following data format:

- Sign or X, X, X, (dp), X, 0D<sub>H</sub>, 0A<sub>H</sub>
- 9600 Bd, 1 start bit, 8 data bits, 1 stop bit

#### **2. Limiting value**

The instrument is provided with a optocouple output for limiting value function. Following function can be programmed:

- Alarm point and hysteresis
- High or low alarm



### **Power supply**

- 18 .. 36 V DC isolated
- Optional 12 V DC isolated
- Optional 5 V DC isolated

### **Programming**

The programming is easy and clearly arranged. By means of a programming menu the user is taken through this programming. The programming is carried out through the digital input channels.

### **Options**

#### **Housing type**

- Switch board mounting DIN 43700
- Mosaic system mounting (Subklev, Siemens 8RU)

#### **Colour of the front frame**

- Black

#### **Design of the front**

- Without front foil
- Front foil ERMA-METER or NEUTRAL
- Unit overprint

#### **Display colour**

- Red
- Green

## Technical data

Ranges	
Potentiometer	: 1k...10k
Input resistance	: >1 M Ω
Accuracy	: 0,1% ± 1 digit
Conversion rate	: approx. 5 per sec
Digital inputs	: 10 kΩ to +5 V
	: low level < 0,4 V
	: high level > 3,5, max. 30 V
Optocouple output	
Limit value	: max. 10 mA, 70 V, max. 150 mW
Serial data	: 9600 baud, 1, 8, N, 1
Power supply DC	: 18 V to 36 V DC, isolated
optional	: 12 V DC, ± 10 %, isolated
optional	: 5 V DC, ± 10 %, isolated
Power consumption	: approx. 65 mA (red display)
(18 .. 36 V DC)	: ca. 75 mA (green display)
Display	: 4 decades, 14 mm, red
	(opt. green)
	: Decimal point programmable
	: leading zero blanking
Housing	: switch board mounting DIN 43700
Dimensions	: 96 x 48 x 63,5 mm
Depth	: < 72 mm incl. screw terminal

## Environmental

Operating temperature	: 0 .. 50 °C
Storage temperatur	: -20...70 °C
Humidity	: < 80% non-condensing
Protection	: front IP 40
EMC	: in conform with 89/336/EWG

## Ordering information

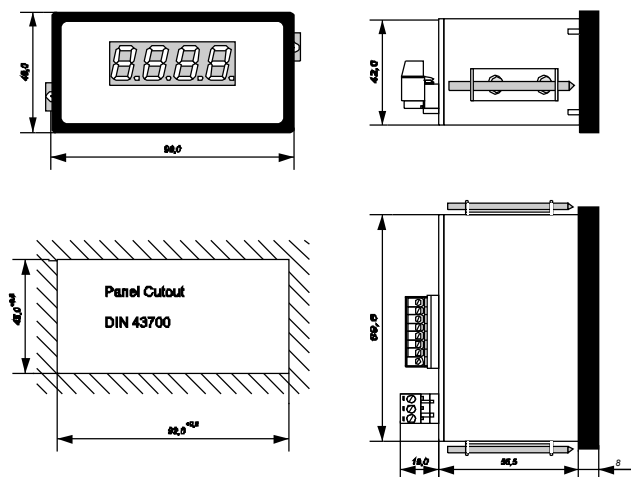
<b>UM 3012 -</b>	
	<b>Housing</b>
	0 Switch board mount
	1 Panel clip
	<b>Front frame colour</b>
	0 Black
	<b>Front design</b>
	0 Without front foil
	1 Front foil ERMA-METER
	2 Front foil NEUTRAL
	<b>Display colour</b>
	0 Red
	1 Green
	<b>Power supply</b>
	0 5 V DC, ± 10%, isolated
	1 12 V DC, ± 10 %, isolated
	2 18 .. 36 V DC, isolated

## Unit overprint

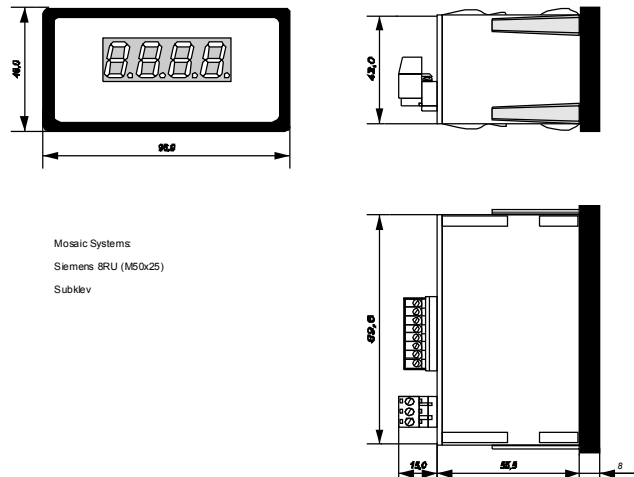
Please specify in clear text at order !

## Dimensions

### Switch board mounting



### Panel clip



Mosaic Systems  
Siemens BRU (M50x25)  
Subkleb