

- ✓ 6 digit display  $\pm 999999$
- ✓ Up to 20 000 true increments
- ✓ 0 - 200mV to 0 - 380V true RMS
- ✓ 0 - 20mA to 0 - 10A true RMS
- ✓ 0 - 2500 W true RMS
- ✓ Free programmable
- ✓ Analog Output
- ✓ Serial Output Ports
- ✓ Excitation
- ✓ Two Set Point Relay
- ✓ Supply 115/230VAC



**Large Displays OC57-RMS, OC100-RMS and OC125-RMS** are 4 or 6 digit programmable instruments with up to 20'000 true increments and selectable inputs for various signals such as voltage from 0-200mV to 380V true RMS, currents from 20mA up to 10A true RMS or power up to 2300 W true RMS.

They can be ordered with 57mm, 100mm or 125mm large 7 segment digits.

By using the programmable multiplicative factor, the display can be scaled in required process units such as V, m/sec., RPM, Wsec, kg, gr, lb, kN, W, kW etc.

The displays are designed as process monitors without any control function, or as process controllers, generating control outputs.

Depending on the application, the control outputs can be two or four set point relay or open collector transistors, two analog outputs and two serial data ports. After applying the power to the instrument, the parameters and the operating mode are read from the memory and entered into the microcontroller. The display shortly shows the model and the software version and switches into the measuring mode.

## FUNKTION

The menu can be entered with the keyboard. It contains the selection of two set points, measuring range, filter, two analog outputs, measuring speed, display rate, resolution and decimal point, serial port parameters and the password.

The input signal limits (input signal *low* and *high*) can be assigned with the keyboard to the required display, e.g. input 0 -10VAC = 0 -150.00.

**Set Points** are programmable within the entire display range  $\pm 999999$ . They activate two open collector transistors or two mechanical relay. Each set point has programmable delay and hysteresis.

**Digital Filter** with averaging characteristic can be used for noisy signals or environments. The filtering constant can be selected from 0 to 99.

**Analogue Outputs** 0... $\pm 10$ V and 4-20mA are generated simultaneously. With the keyboard they can be assigned to any two desired display values. They are isolated from the input and the supply.

**Tara** is an additive constant which is activated with the keyboard or with external logic control signal. It forces the display to zero.

The Tara can be canceled at any time with the keyboard and the display returns to show the original signal.

The Tara remains stored in a non-volatile memory also when the instrument is switched-off from the power.

**Peak and Valey Memory** measures and stores the maximum and the minimum of the display. With the keyboard the stored values can be recalled at the display.

**Two Serial Data Ports** RS232 and RS485 are available. The RS485 has a programmable address and permits the instrument to communicate on a data bus.

**Password** is used to prevent unauthorized entry into the menu and setting of parameters.

**Excitation** is for supplying of external sensors and is isolated and adjustable from 5 to 24VDC.

**Soft Manager** at a diskette is a communication program available for WIN applications.

## SPECIFICATIONS

### DISPLAY

0 ...  $\pm$  999999, 7 Segments red LEDs, 57, 100 or 125mm with decimal point and sign.

### RANGES

#### Current

0-20mA to 0-10A RMS

Accuracy: DC-1kHz:

$\pm$  (0.2 % f. range + 1 digit).

#### Voltage

0-200mV to 0-380V RMS

Accuracy: DC-1kHz

$\pm$  (0.2 % f. range + 1 digit).

#### Power

0-2300 W true RMS

Voltage: 0 - 230V RMS

Current: 0-10A RMS

Accuracy: DC-1kHz

$\pm$  (0.3 % f. range + 1 digit).

#### Temp. Coefitient

25ppm/K

### ANALOGUE OUTPUT Option

4-20mA / <390 Ohm max.

0 ...  $\pm$  10V / >10kOhm

Resolution 12 bit. Option16 bit.

Isolation 250V r.m.s.

### TARA

The display can be reseted to zero with the key SET, or with external control logic signal 5V (protected to 48V). When the key is pressed for a second time, the display returns to the original signal. The Tara remains stored in internal non-volatile memory also when the instrument is switched-off from the power.

### SET POINTS - Option

Two 6 digit set points with 60V/100mA open collector NPN transistors or mechanical relay 5A-230VAC. Selectable from -999999 to +999999.

#### Hystereze

Individually selectable in each set point between 0 and 99.

#### Delay

Is in each set point selectable from 0 to 3900 ms.

### FILTER

Programmable from 0 to 99.

### SERIAL PORTS - Option

RS 232 and RS 485, with 8 bit, no parity, 1 start, 1 stop, 300 to 19200 bd. The address 0 activates the RS232. One of addresses 01-31 activates the RS485.

### EXCITATION - Option

5 to 24VDC/40mA adjustable and isolated by 250V r.m.s.

### SUPPLY

115/230V  $\pm$ 10%, 48 - 60Hz.

### CABINET - Aluminum

OC57: 4 and 6 digits:  
112x368x80mm.

OC100-4: 4 digits:  
173x458x80mm

OC100-6: 6 digits:  
173x644x80mm

OC125-4: 4 digits:  
229x535x80mm

OC125-6: 6 digit:  
229x748x80mm

Protection: IP65 - front.