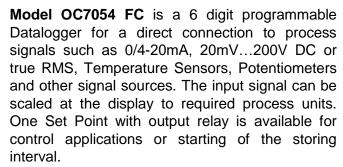# Datalogger for Analog Signals
OC 7054 FC

- ✓ 6 Digit Display 0 ... ± 999999
- ✓ Inputs 0/4-20mA, 20mV…200VDC
- ✓ Pt-100, Pt-200, Ni
- ✓ Thermocouples J,K,E,S,B,T,C
- ✓ 128 MB Compact Flash™
- ✓ Set Point Relay
- ✓ 115/230VAC or 9-36VDC
- ✓ RTC Real Time Clock

Model OC7054 FC is a 6 digit programmable Datalogger for a direct connection to process signals such as 0/4-20mA, 20mV…200V DC or true RMS, Temperature Sensors, Potentiometers and other signal sources. The input signal can be scaled at the display to required process units. One Set Point with output relay is available for control applications or starting of the storing interval.

The measured results are stored in a 128MB Compact Flash™ Card. In addition to the input data also the date of the day and the real time are memorized. They are derived from the internal RTC. The data content in the Compact Flash™ Card can be read-out in a PC under Windows.

Input Signal can be assigned to the required display reading with the keyboard at the instruments front. The minimum and the maximum values of the input signal can easily be assigned to any two display readings, such as 0-20mV at the input equals to 0-1500.0 at the display. The display shows overload when the input signal exceeds 110%.

Display Resolution can be set for up to five decimal points.

One Set Point can be set within the entire display range. An open collector transistor or a mechanical relay is available at the output terminals.

Sampling Rate can be set for SLOW or FAST. The FAST sampling corresponds to 66ms conversion time, the SLOW rate is 200ms. Appart of this, the display can be refreshed after 1 up to 16 measurements.

Display Count of the Last Significant Digit can be set for 1,2,3...9,0 or 2,4,6,8,0 or 0,5,0,5…. or firm dummy zero.

Digital Filter is programmable between 1 and 99 and calculates the average value of the processed signal before the result is shown at the display. The filter is mainly used for noisy signals to achieve steady readings.

Tare is activated with the keyboard and resets the display to zero. The Tare remains memorized also when the instrument is switched-off from the power. The Tare function can be cancelled at any time, forcing the display to return to the original Non-Tare signal.

RTC-Real Time Clock is an internal generator of the real time and the date of the day. The time and the date are being added to each memory cycle.

Memory Card used for the storing of the measured results is a 128MB Compact Flash™, which is inserted into the slot at the instrument's front. To each stored measured value, the time and the date from internal RTC are added. The beginning and the end of the storing interval can be defined from the keyboard, or initialized from the Set Point. The storing interval can be set from 1 second to 1 minute. For one cycle 32 Bytes of memory capacity are required. At the storing rate of 1 sec. up to four million measurements can be memorized. At the end of the measurement, the Card can be removed and inserted into the card reader of a PC. The results are available under Windows.

SPECIFICATIONS - OC 7054 FC

INPUTS

DC and AC true RMS Signals
± 20mV to ± 200V DC.
0/4-20mA to 5A.

Pt-100, Pt-200 Thermometers
2 or 4 terminals connection.
Range: -200.0 ... + 650.0 °C.

DIN-Thermocouples
E, J, K, S, B, T, C

Could Junction
Automatic ambient temperature compensation from 0 to 60 ºC or firm setting to 0ºC for external correction.

A-D CONVERTER
Selectable Rate 66ms (14 bit) or 200ms (17 bit).

Linearity
± (1 LSB + 1 digit).

Accuracy
DC: ± (0.01% of value + 1 digit).
RMS: ± (0.1% of value + 1 digit).
Temp.: ± (0.1% of value + 1 digit).

DISPLAY
6 digit red or green, 7 segment LED 14.7mm with decimal points and sign. The reading can be refreshed from 1 to 16 measurements.

FILTER
An average value filter has programmable constants from 1 to 99 and is available for noisy signals and environments.

TARE
The activated Tare forces the display to read zero. When deactivated, the display returns to show the original Non-Tare signal.

SET POINT
One 6 digit Set Point activates an open collector transistor 60V-100mA or a mechanical relay 5A-230VAC. The hysterese can be set from 0 to 99 increments, the delay from 0 to 3600ms in 100ms steps.

KEYBOARD
Five keys at the front for entering the menu and setting of process parameters.

SUPPLY
115V/230V ± 15%, 48 - 60 Hz.
Option: 9-36VDC, 4W.

CABINET
DIN 48 x 96 x 150 mm (H x W x D).
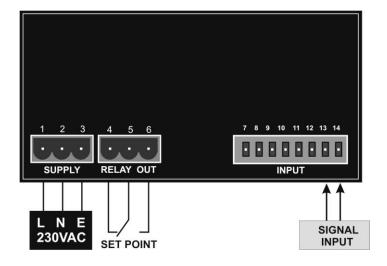Panel cut-out: 45 x 90 mm.

TERMINALS
Plugable screw terminals.

EXCITATION
5-24V/40mA adjustable with internal potentiometer.

MEMORIZED DATA FORMAT

Time	Date	Signal
16:46:02	10.09.03	4398
16:51:07	10.09.03	7302
16:56:12	10.09.03	9496
17:01:17	10.09.03	12221
17:06:22	10.09.03	14064
17:11:27	10.09.03	11384
17:16:32	10.09.03	9182
17:21:37	10.09.03	6584
17:26:42	10.09.03	2502

TERMINALS OC7054 FC - rear