orbit controls

- ✓ 8 Signal Channels, 11869 Memory Cycles
- ✓ 0/4-20mA or ± 2V DC
- ✓ Pt-100 two or four wire connection
- ✓ DIN Thermocouples
- ✓ Storing Interval 1 second to 2 hours
- ✓ Trigger Input, automatic Storing
- ✓ Free Scalable Display
- ✓ Memory Format: Value, Date and Time
- ✓ One Set Point
- ✓ RS232 and RS485

Model OC7052 is an eight channel process Monitor-Datalogger for analogue signals such as 0/4-20mA, DC voltages, Pt-100 or thermocouples. The measured signals are scanned and displayed in required process units at the digital display. The number of signal channels can be selected from 1 to 8.

The inputs can be assigned to different signal types such as DC voltage and DC currents, Pt-100 and Thermocouples or any other combination. Each signal channel is individually programmable.
The inputs are scaled, multiplexed, digitized and shown at the display.

The keyboard at the front permits the entry into the menu and setting of the process parameters in each signal channel individually. The menu contains the measuring range, storing intervals, display resolution, setting of the set point, setting of the real time clock with date and time and selection of the serial data ports.

For the temperature measurements the DIN linearizing tables for Pt-100, Pt-200, Ni, Thermistor and Thermocouples are available. The thermocouples can be used with internal or external cold junction compensation.

The channels can be scanned manually from the keyboard or automatically in preselected intervals. The data storing can be switched-off or activated in intervals from 1 sec. to 2 hours. A trigger input is available for initializing of the storing cycles. The storing can also be initiated from a set point or from a pre-programmed date and time.

One Set points SP1 activates an open collector transistor or a mechanical relay. The SP1 can be free assigned to any of the signal channels.
Two serial data ports RS232 and RS485 are options. RS485 has a programmable address. The baud
rate can be set from 1200 to 38400 baud.

All parameters can be set from the keyboard or via the serial data port. A Soft manager OrbCom is enclosed to each Datalogger and permits communication with a PC.

The stored measurements in the Datalogger can be transferred into the PC and handled under Windows. The communication is bi-directional. For easy handling, the Datalogger parameters can be set in the PC and transferred via the serial port to the Datalogger and stored there.

The display shows the measured values and the channel numbers 1-8. It can also be set to display only one channel or to show the time or the date.

The memorizing of the measurements can be switched-off and the instrument acts as eight channel Data Monitor.

The Datalogger is enclosed in a DIN 48x96mm cabinet with IP65 front protection.

SPECIFICATIONS OC 7052

DISPLAY
± 0.00000 ... 999999, 7 Segment red, 14.7mm. For temperature measurements the display resolution can be set for 0.1°C or 1°C. The display intensity is adjustable with the keyboard.

INPUTS
DC Signal Inputs
0/4-20mA or ± 2 V DC differential. Eight Inputs for DC Signals in two wire termination.
Pt-100, Pt-200
Two- or four wire termination. All sensors are serially connected and supplied from 800 A current source.
T/C Thermocouples
E, J, K, S, B and T. Eight differential signal inputs for 8 Sensors. Build-in cold junction compensation can be used or switched-off when external compensation is used.
Auxiliary Inputs
Four digital auxiliary Inputs are available for initializing of the memorizing cycle. The memorizing starts when one of the inputs is closed with GND. The inputs can be customized for various functions.
Linearizing
The linearizing accuracy is ± 1°C, ± 1 Digit.

AD CONVERTER
18 Bit ADC, 15 samples/sec. Accuracy: ± 0.05% from FS, ±1 Digit
Tempco: ± 25 ppm/K

SCALING
The minimum and the maximum input signal values in each signal channel can individually be assigned with the keyboard to any two desired display readings. This permits connection of variety of signal sources to the Datalogger.

MEMORY
4 MBit (512k x 8 Bit) Flash. 4 Byte/Channel are required for one memory cycle. This results in totally 32640 available cycles. If all 8 Signal channels are activated, the total memory capacity is 11869 cycles.
Storing Interval
Selectable from 1sec. to 2h.
Trigger Input
The memorizing will be initialized when closed to GND.

Format
Measured value, Date, Time, Channel Number.

SET POINT SP
Adjustment within the entire Display range ± 999999. Output: NPN open collector 60V/100mA or mechanical Relay with closure contacts 5A-230VAC.

SERIAL PORTS
RS232 and RS485 two or four Terminals, 8 bit, no Parity, 1 Start, 1 Stop, 1200-38400 bd. The address 0 activates RS232. RS485 has addresses 1-31.

SUPPLY
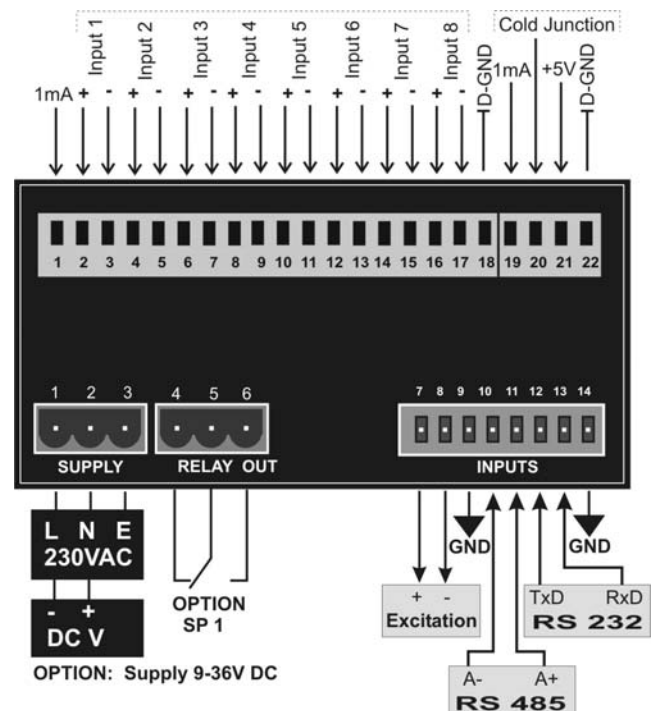115V / 230V, ± 15%, 48-60 Hz, 8VA. DC-Option: 9 ... 36V DC, 4W.

TERMINALS
Pluggable Screw Terminals

CABINET IP65
DIN 48x96x150 mm (H x W x D)

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