



Programmable Linearizer INF8-LIN

- ✓ 6 digit Display ± 999999
- ✓ $\pm 30\,000$ Function Points
- ✓ 4000 Linearizing Points
- ✓ Input $\pm 200\text{mV}$, $\pm 2\text{V}$, 0/4-20mA
- ✓ Programmable via PC
- ✓ Linearized Analogue Output
- ✓ Four Set Point Relay
- ✓ Soft Manager for Windows
- ✓ Excitation



Model INF8-LIN is a 6 digit programmable high resolution digital linearizer with 4000 points. It is designed for linearizing of bipolar analogue signals within a function range of up to $\pm 30\,000$ increments. The linearizing points can be entered in table form point by point. Not used points are linear interpolated.

The table will be entered from a PC by using the Soft Manager INFLIN+ which also permits setting of parameters such as scale, offset, analogue output, set points and serial data ports.

Scale is a multiplicative 6 digit constant with decimal point and sign.

Four Set Points SP1 - SP4 can be set within the entire display range ± 999999 . They activate output transistors or relay.

Two analogue outputs 0... $\pm 10\text{V}$ and 0/4 - 20mA are isolated and generated simultaneously. With the keyboard or data port they can be assigned to any display value.

Two data ports RS 232 and RS 485 are isolated. The RS485 with a

programmable address permits the instrument to operate on a data bus.

Tara is activated with the keyboard and forces the display to zero.

Preset - digital offset - is an additive constant. The linearized curve will be offset by the preset value.

INF8-LIN+ Soft Manager runs under DOS or Windows and permits file operations, generating the tables and setting of the instrument's parameters from the PC.

The linearized function appears at the PC screen in a graphical and a table form. A zoom function and coordinate transformation is available.

The created table and the corresponding function can be stored in the PC for later use. The points can be modified upon demand. The final table can be transferred to the linearizer and stored there in a non-volatile memory. It remains memorized also when the instrument is switched-off from the power.

The stored table in the linearizer can also be transferred back to PC and displayed as a graphic function and as a table. It can be compared with another in PC stored function and

modified. The function transferred from the linearizer to the PC is shown at the PC monitor in red, the one of the PC is green. The common intersections are yellow.

When modifications are performed in the PC, the resulted function can be transferred back to the linearizer.

A pointer can be used for exact determination of the X and Y coordinate values of the graphics. The display of the linearizer can selectively show the linearized points (Y) or the measuring points (X). Six digits are available for the linearizing value, 3½ digits for the input signal.

Hardware requirements

INF8-LIN+ Soft Manager for Windows is delivered with each linearizer.

PC Screen displays the graphic form as well as the table of the linearized function with up to 4000 points.

The table contains the index (1-2000) and the value (-30 000 ... + 30 000).

X - Coordinate shows the input signal $\pm 200\text{ mV}$, $\pm 2000\text{ mV}$ or 0/4-20mA.

Y - Coordinate shows the value between 0 and $\pm 30\,000$ increments.

SPECIFICATIONS

Input

Standard: ± 2000 mV DC.
Option: ± 200 mV or 0/4 - 20mA.

Display

6 digits, 7 segment red LED with sign and decimal point. The display size is 14,7mm.

Linearizing Points

Max. 4000 points. The not used points are linear interpolated.

Range: 0 ... $\pm 30\,000$ function value.

Accuracy

$\pm (0.05\%$ of F.S. + 1 digit).

Preset

6 digit offset with decimal point and sign.

Scaling

6 digit multiplicative constant with decimal point and sign. Floating point arithmetic assures automatic point placement.

Set Points

Four Set Points programmable from -999999 to +999999. Four NPN output transistors 60V/100mA.
Option: Four mechanical relay 5A-230VAC.

Analogue Outputs

Voltage: -10V ... +10V
Current: 0/4 ... 20mA
Resolution: 12 bit
Option: 16 bit
Isolation 250V rms.

Data Ports

RS232 or RS485 (4 wire) with 8 bit, no parity, 1 start, 1 stop. 1200-9600bd, address 0 to 31.
The outputs are isolated by 250Vrms.

Supply

Mains: 115/230V $\pm 10\%$, 50-60Hz, 7VA.
Option: 9-36VDC-3W

Excitation

5V, 12V, 15V or 22V/30mA.

Cabinet

DIN 48 x 96 mm x 150 mm. Panel cut-out 45 x 93 mm.
IP65 from the front.

Tara

Tara function is activated with the keyboard and forces the display to zero.
The Tara can be cancelled and the display returns to follow the Non-Tara input signal.

Orbit Controls is a manufacturer of digital instruments for industrial applications. To the main products belong digital counters, programmable controllers, tachometers, flow counters and controllers, batch counters, analogue signal controllers, dataloggers, multipoint switch, large digit displays, transmitters and instruments on customer requirements.

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