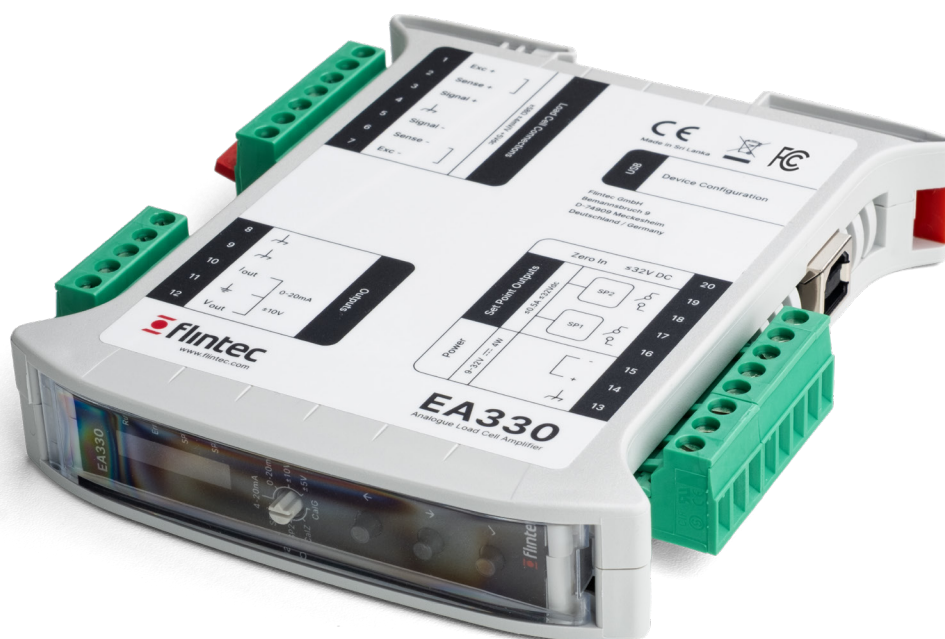


EA330 Analogue Amplifier



product description

The EA330 builds on the same accurate, economical platform as the EA310 but adds greater output flexibility and advanced I/O. It offers six selectable output ranges – 4–20mA, 0–20mA, 0–10V, 0–5V, –10 to +10V and –5 to +5V – making it easy to match almost any PLC or controller input, including bipolar voltage ranges selected through the FDC software.

Like the EA310, it drives up to six 350Ω load cells at 5VDC via a 24-bit Delta-Sigma converter with 65,000-count external resolution and $\pm 0.015\%$ linearity, and supports selectable sampling rates from 2.5 to 1200 SPS with both running-average and IIR digital filtering. The EA330 can be calibrated from the front panel or electronically without test weights using FDC software over USB, and adds a remote high-side zeroing input plus two solid-state relay setpoint outputs (32VDC, 0.5A) with dedicated indicator LEDs.

In the same DIN-rail enclosure and 9–32VDC, –25 to +70°C operating envelope as the EA310, the EA330 suits applications that need multiple output formats, remote zeroing, or on-board setpoint switching for control and alarm functions.

applications

Filling, dosing, batching and bagging with setpoint limit/target control

Force, load and tension/compression measurement for test, R&D & process rigs

Checkweighing, over/underload alarms and remote-zero weighing on PLC-controlled lines

key features

Six selectable output ranges:
4–20mA, 0–20mA, 0–10V, 0–5V,
–10 to +10V, –5 to +5V

16-bit very-low-drift D/A
converter with around
65,000-count external resolution

24-bit Delta-Sigma A/D, $\pm 0.015\%$
linearity, selectable 2.5–1200 SPS

Running-average and IIR digital
filter options

5VDC excitation for up to 6x 350Ω
load cells; 4 or 6-wire bipolar input

Remote zeroing input plus two
solid-state relay setpoints
(32VDC, 0.5A) with LEDs

Front-panel or electronic
calibration (no weights) via FDC
software over USB

Compact DIN-rail enclosure
(EN60715, IP20), –25 to +70°C



RoHS
compliant



specifications

Model	-	EA330
-------	---	-------

Analogue Output

Current	mA	4-20 0-20
Voltage	V	0-10 0-5 -10 to +10 -5 to +5
D/A converter	-	16-bit very low drift
External resolution	Counts	65,535

Load Cell Interface

Minimum bridge resistance	Ω	58 (6x 350)
Excitation	V	5
Connection	-	4 or 6 wire (external jumpers for 4-wire)

A/D Conversion

Input signal range	mV/V	± 4
A/D Converter	-	24-bit Delta-Sigma
Linearity	%	± 0.015
Internal resolution	Counts	16,000,000
External sampling rate	SPS	2.5 to 1200
Digital Filter	-	3x Running Average and IIR options

Setup & Communication

Mode selection	-	Via rotary switch Bipolar voltage output selected via FDC software
Calibration	-	Via rotary switch and push buttons OR via FDC software Electronic calibration (without weights)
Setpoint adjustment	-	Via rotary switch and push buttons OR via FDC software
Indicator LEDs	-	RUN, ERROR & 2x SETPOINT
PC software	-	FDC
Digital communications	-	USB

Power Supply

DC supply only	V	9 to 32
----------------	---	---------

Digital Input

Type	-	1x high side zeroing input
Max input voltage	V DC	32
Min threshold voltage	V DC	3
Input impedance	kΩ	15

Digital Set-point Outputs

Type	-	2x solid-state relay connections
Max voltage	V DC	32
Max current	A	0.5

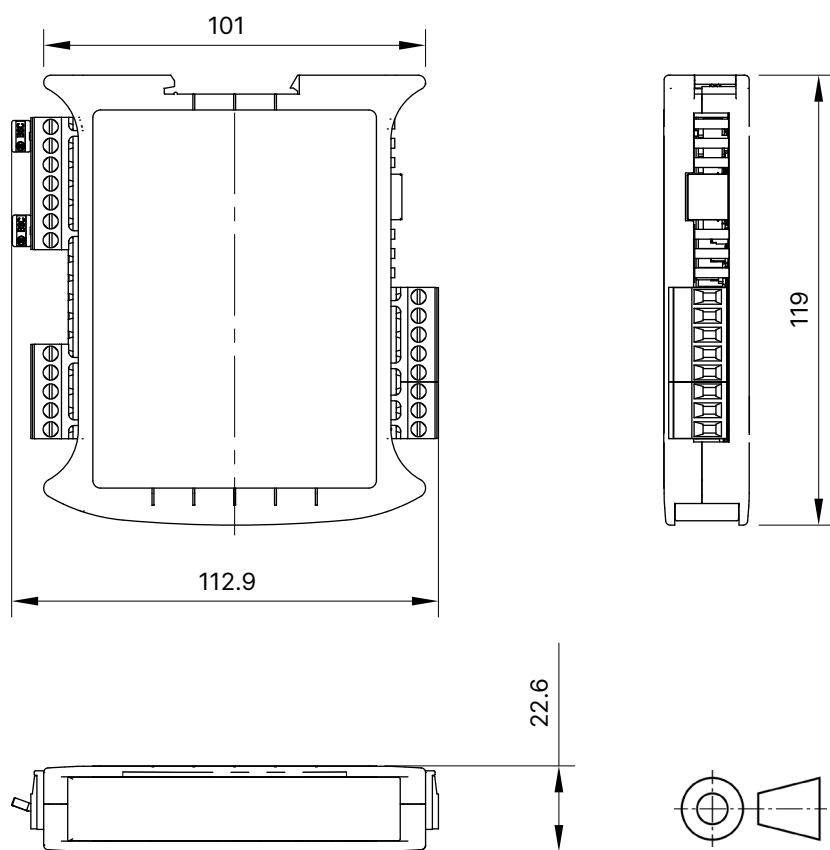
Environmental & Enclosure

Operating temp range	°C	-25 to +70
Storage temp range	°C	-25 to +70
Humidity	%RH	Max 85, non-condensing
Enclosure	-	DIN-rail mount EN60715, IP20

Approvals & Standards

EMC	-	EN61326-1
RoHS	-	EN IEC 63000:2018

product dimensions (mm)



Dimensions and specifications are subject to change without notice.