

MK-835A

Weighing transmitter



- 8 weighing channels (supervision and direct control of each connected load cell)
- Analog output 0-20, 4-20mA/0-10V
- 3 logic inputs
- 5 logic relay outputs
- RS485 serial port for connection to PC/PLC, remote display and printer
- Zero-setting of weighing system
- Theoretical calibration by using buttons
- Dead weight calibration
- 3 configurable inputs to be used for net/gross function, semi-automatic zero, peak, print and remote control
- 5 setpoints configurable as normally open or normally closed or remote control.
- Setting of hysteresis value for each setpoint
- Peak & Anti Peak
- Filter to stabilize the weight variations
- External 0-setting of the weighing system
- Semi-automatic tare and predetermined tare (net/gross weight)
- Automatic zero setting at power-on
- Zero tracking and Semi-automatic zero
- Linearization (8 set-points)

The MK-835A weight transmitter has 8 independent reading channels for load cells to be used for monitoring and direct management of the individual load cells connected. The transmitter has the same benefits and performance of an advanced digital weighing system even using analog load cells. The MK-835A unit is a DIN rail mounted transmitter. The transmitter has LCD display and a five-key keypad for system calibration and a Test key for direct

access to diagnostic functions. The MK-835A is designed to store the percentage value of load distribution for each channel. The diagnostic function makes comparisons between the recorded values and if a significant variation between the values is detected during normal operation, the instrument displays an alarm alternating with the weight value. Depending on the weighing system type it is possible to perform: Load automatic diagnostics, load distribution control in constant barycentre systems (e.g. liquids silo), and Automatic diagnostics on zero, check on load cells drift state (e.g. silo, weighbridge, platforms).

The instrument allows equalizing of the connected load cells response, fast and reliable over time. The MK-835A performs a load distribution synoptic analysis on 8 channels with archive backups, storing, retrieving and printing. The transmitter has an Event log, which archive data backups in chronological order of the last 50 events related to calibrations, zero settings, errors and equalizations. The information can be stored, retrieved and printed. RS485 (Modbus RTU) transmission of the divisions for the 8 independent reading channels.

Options for Communications:

- RS485 and 16-bit analog out-put (standard)
- CANopen
- DeviceNet
- PROFIBUS DP
- Modbus/TCP
- Ethernet TCP/IP
- Profinet IO

Technical data

Power supply and Consumption:	12-24 VDC \pm 10%; 5 W
Number of load cells • Connection:	Max 16 (350 Ω) • 4 or 6 wires
Load cells supply:	5 VDC/240 mA
Load cell's sensitivity • Measure range:	Max 7 mV/V • max \pm 39 mV
Linearity of the analog output:	<0.01% Full scale • <0.01% Full scale
Thermal drift of the analog output:	<0.0005% Full scale/ $^{\circ}$ C • <0.003% Full scale/ $^{\circ}$ C
A/D Converter:	8 channels - 24 bit (16000000 points) 4.8 kHz
Divisions:	Max 999999 • 0,01 μ V/d (with measure range \pm 10 mV and sensitivity 2 mV/V)
Divisions (CE-M approved):	Max 3x10000e • 0,2 μ V/VSI (with measure range \pm 10 mV and sensitivity 2 mV/V)
Conversion per second:	Max 600
Decimals • Display increments:	0 - 4 • x1 x2 x5 x10 x20 x50 x100
Digital filter • Conversion rate:	0.006 - 7 s • 5 - 600 Hz
Relay logic outputs:	n. 5 - max 115 VAC/150 mA
Logic inputs:	n. 3 – opto-isolated 5 - 24 VDC PNP
Analog output:	16 bit, 0-20 mA; 4-20 mA (max 300 Ω); 0-10 V; 0-5 V (min. 10 k Ω).
Serial port:	RS485
Baud rate:	2400, 4800, 9600, 19200, 38400, 115200 (bit/s)
PROFINET IO port:	RJ45 10Base-T or 100Base-TX
Humidity (condensate free):	85%
Storage temperature:	-30 $^{\circ}$ C +80 $^{\circ}$ C
Working temperature:	-20 $^{\circ}$ C +60 $^{\circ}$ C
Working temperature (CE-M approved):	-10 $^{\circ}$ C +40 $^{\circ}$ C
Dimensions:	148x92x60 mm



OIML R76:2006, III class, 3 x 10.000 divisions 0.2 μ V/VSI approved/certified.