Gallbergweg 21 · 59929 Brilon/Germany · T + 49 (0) 29 61 - 74 05 - 0 · F + 49 (0) 29 61 - 5 07 14 · sales@rembe.de · www.rembe.de

EVA Standard

The EVA Standard is an embedded system based electronic weight controller for flow and belt scale applications.

It is designed for totalising and indicating the flow rate of C-LEVER® *direct* and UNIBAND® belt conveyors.

The stainless steel housing is made for multi purpose mounting like panel mount, wall mounting and table top.

Features

- **Built in a "Modular Structure" main board and optional boards**
- **Main board consists of all necessary parts for main control functions of flow and belt scale.**
- **The cards inserted on the board offers a wide range of features for connectivity, various interfaces, control Inputs and Outputs exactly suited to the application.**
- **Isolated Power Supply, ADC, 2 serial communication, Digital Outputs, Digital Inputs, 2 relays. Programming interfaces are all integrated on the main board.**
- **The optional cards are inserting type where they will be used exactly according to the customer application like Inputs, Outputs, Analog In/Out, SD Memory, Multi serial communication, Modbus, Ethernet IP, Modbus, ProfibusDP, Wireless WIFI, belt speed detection.**
- **Stainless Steel Housing**

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Technical Data

1. Operator Interface:

Display:	Vacuum Florescent Display, Graphic Blue High Contrast and 2x20 emulation
Keyboard:	8 functional buttons for calibration, programming and other functions.

2. ADC:

ADC:	24 Bit Delta Sigma (parts: 16,777,216)
ADC Conversion Speed:	Selectable 100 sps…..3200 sps
ADC Non-Linearity:	0.0007 % FSD
Load Cell Connection:	6 wire or 4 Wire technique, 1 mV/V , 2 mV/V, 3 mV/V, 8 pieces 350 ohm load cells
LC Excitation Voltage:	5V DC

3. Calibration: Full calibration facilities

- Calibration with calibrated weights
- Automatic Calibration
- Flow Calibration
- Software controlled calibration all data kept in nonvolatile memory

4. Power Supply: 24 VDC (wide range of power supply 9 - 36 VDC)

5. Communication: 2 com ports standard on board, additional 5 com ports optional.
Optoisolated data ports for continuous and manual data transmit or receive.
Full duplex, Half duplex

- Serial Communications: RS232, RS485 / Full Duplex / Half Duplex / RS422 / USB, Modbus RTU
- FieldBus communication: Ethernet TCP/IP Modbus, Profibus DP (Option)

6. Housing: Stainless steel, Panel mount, wall mount and table top
IP65 front splash water

7. Outputs:

- 2 Galvanically isolated via opto-coupler
- NPN transistors, open collector and relays

8. Inputs:

- 2 Galvanically isolated via opto-coupler
- Passive mode

9. Analog Output: Isolated 4-20 mA / 0 – 10 V, (12-bit, 16-bit resolution)
10. Analog Input: 4 - 20mA Isolated for peripherals (optional)
11. Speed Detection: Belt speed encoder input (optional)
12. MEMORY: Three types: 1. EEPROM (on board)
2. Alibi memory: up to 64Mbit Dataflash (option)
3. SD card (MMC) (option)
13. Real Time Clock: The clock/calendar provides seconds, minutes, hours, day, date, month and year information.

14. Environmental :

Location :	indoor/outdoor
Operating Temperatures:	-10 ℃ to +40 ℃
Storage Temperatures:	-20 ℃ to +70 ℃

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Technical Data

Options

1. Input/Output Card:

Outputs:
- 8 Galvanically isolated via opto-Coupler/Relais
- NPN transistors, open collector or Relais 12VDC
- External supply, no common reference potential
- Protected against wrong polarity
- Signal level / current up to max. 32V, 75mA
- Voltage drop Iload x 55 ohm+1V
- Load spark suppression must be provided for inductive loads as close as possible to the load

Inputs:
- 8 Galvanically isolated via opto-coupler
- Passive mode
- External supply, no common reference potential (ground)
- Protected against wrong polarity
- Input voltage level 10V & 31V for 1 -signal (high), 0V & 5V for 0 -signal or open input
- Input current (high) <5 mA at 12V, <11 mA at 24V

2.	**Analog Output:**	Isolated 4 - 20mA / 0 - 10V , (12-bit, 16-bit resolution)
3.	**Analog Input:**	4 - 20mA Isolated for peripherals
4.	**Serial Communications Cards:**	RS232, RS485 / Full Duplex / Half Duplex / RS422 / USB,Modbus RTU
5.	**FieldBus communication Cards:**	Ethernet TCP/IP Modbus, Profibus DP
6.	**Speed Detection:**	Belt speed encoder input
7.	**Memory cards and extensions:**	- Alibi memory: up to 64Mbit Dataflash - SD card (MMC)
8.	**Web connectivity function**	
9.	**Battery Power**	
10.	**Wireless Communication (ZigBee)**	
11.	**Connectivity and integration Module of other sensors like humidity, temperature.**	

Applications

- **Belt Scales**
- **Flow Meters**
- **Batch Weighing**
- **Material Control**
- **Silo Weighing**

MADE IN GERMANY

Your Benefits

- **Easy Start up menu**
- **Automatic calibration**
- **Stainless Steel housing**
- **State of art technology**
- **Standard communication protocols**

Quality and Service

REMBE® Measuring Systems guarantee a reliable and precise online control at all times. The manufacture of these products is subject to the highest quality requirements in accordance with DIN-EN ISO: 2008, CSA, etc.

For the fulfilment of individual requirements, we offer our customers

- **professional expertise**
- **long-standing application experience**
- **competent consultation**
- **comprehensive product range**
- **on-site Service (commissioning, maintenance & repair)**