

ACCESSORIES

ELECTRONIC DISPLAY UNIT »EDU 32 FP« • DATA-SHEET



General Overview

Application

The EDU 32 FP accessory is a microcomputer-controlled counter and display apparatus. It is designed to be used in conjunction with RITTER Gas Meters, to count and display the absolute volume and flow-rate of Gases flowing through the RITTER Meter. It consists of a unit in a separate (desk top) casing with a two-line Plain-Text-LCD-Display, and can be used with all RITTER Drum-type Gas Meters and Bellows-type Gas Meters. The following individual alterations and functions can be programmed

via the Control Buttons:

1. Gas Meter type being used
2. Individual measurement range (min./max. flow rates) for custom-built Gas Meters
3. Upper and lower limiting values for Flow Rate
4. Pulse Generator in use: Standard (200 Pulses per revolution of the measurement drum), Ex-Proof (50 Pulses/Revolution), 2 x 200 Pulses (forward/backward), 500 Pulses per revolution of the measuring drum or custom-built Models (customer-preferred number of pulses under 200 or 50 respectively)
5. Language German/English in the Display
6. Analog-Output: Current Output or Voltage Output
7. Contrast adjustment of the Display



Technical Data

Power supply

- > either 110 V / 60 Hz or 230 V / 50 Hz (must be specified with order)
- > Over-/undervoltage:
 - > +15%
 - > -5% (with Current Output "On")
 - > -20% (with Current Output "Off")
- > 6 Volt Accumulator for battery operation
- > Standart power socket, power cord ⁽¹⁾

Input

Pulses from Pulse Generator built into Gas Meter, round 5-pin-socket suitable for all RITTER Drum-type Gas Meters and Bellows-type Gas Meters (Type and Model programmable via the control buttons).

Output

1. Interface RS 232 (Standard Sub-D-9-pin-socket):
 - Signal: +/- 15 Volts
 - Transmission rate: 9,600 Baud
 - Data = 8 Bit, Parity = N, Stopbit = 1
2. Analog Output, programmable, round 5-pin-socket:

1. Current Output: 4 – 20 mA or 0 – 20 mA or
2. Voltage Output : 0 – 1 Volt

Display

- > large 2-line LCD Display, 16 characters per line
- > Display language programmable: English / German
- > Display contrast adjustable (via the Menu)
- > Display of:
 - > measured Gas Volume in [Liters]
 - > actual Flow Rate in [Liters per hour]
 - > programmed Gas Meter type/model
 - > power status (Mains / Battery / Low Batt)

Control elements

- > Push-buttons, waterproof

Button	Function
ON/OFF	On/Off
RESET	(in measurement Mode): Resetting the Display to zero
ENTER	(in set-up mode): For scrolling through provided Menu Options and saving of selected option
MODE	(in measurement Mode): Choice of Display "Volume" and/or "Flow Rate"
SELECT	(in set-up mode): For selection of required Menu Option

Further Functions

- > Data transmission via RS 232 to a PC
- > Configuration of the EDU 32 FP from the PC
- > Pre-selection of a minimal or maximal Flow Rate
- > Acoustic Signalling (Beep) when the Flow Rate values exceed the pre-selected min./max. range
- > Power supply for the power interface can be turned off (to in-crease the running time during battery operation)

Control Codes

(for data transmission from Interface RS 232 to Computer)

- > Ctrl-V (Hex 16) provides: VOL 00000,00 LTR
- > Ctrl-F (Hex 06) provides: FLOW 000,00 L/H
- > Ctrl-C (Hex 03) causes: RESET
- > Ctrl-T (Hex 14) provides: Type + Power Status

Fuse

- > 0.1 Ampere – located at the rear wall in a fuse drawer below the power socket. The fuse drawer contains a spare fuse as well.

Dimensions

- > Width x depth x height = 155 x 200 x 120 mm

Weight

> 1,4 kg

Temperature Range

> 0 °C to + 50 °C

Scope of supply

- > Power cord (with delivery into countries with German Standard for socket / plug only)
- > Connection cord to Pulse Generator

V 5.2 / Rev. 2019-08-07 / Subject to alterations.

The most recent version of this data-sheet can be found at <https://www.ritter.de/en/data-sheets/electronic-display-unit/>

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