

Made in Russia



TIK-CNV converters





TIK-CNV converter series

TIK-CNV 1216

- Measured value: charge
- Measuring range (amplitude value): ± 280 pCL
- RS-485 digital output

TIK-CNV 1316

- Measured value: voltage (IEPE interface)
- Measuring range (amplitude value) : ± 5 V
- RS-485 digital output

TIK-CNV 1116

- Measured value: current
- Measuring range: 0-21.5 mA
- RS-485 digital output

TIK-CNV 1416

- Measured value: voltage
- Measuring range: -23.5...0 V or 0...+23.5 V
- RS-485 digital output

TIK-CNV 15x6

- Measured value: temperature (thermal resistance)
- Supported types of thermoresistances: copper and platinum (according to GOST6651-2009)
- RS-485 digital output



Product appearance may vary slightly from that shown in the brochure

TIK-CNV converters

Designed to measure output values from external sensors, convert the values into digital form, and transfer the received information to the external telemechanics and control system.



Product appearance may vary slightly from that shown in the brochure

Description

The main purpose of the device is to operate as part of a **distributed system** (consisting of the TIK-PLC 896.11 controller, several TIK-CNVs and sensors) and to implement the following functions: **sampling, time synchronization, measurement channel failure detection**.

On the basis of samples, the controller can perform advanced diagnostics - construction and analysis of spectra, execution of diagnostic rules.

TIK-CNV also calculates the following parameters of the measured quantity - RMS, amplitude, magnitude (calculated for the input signal as well as for its 1 and 2 derivatives, 1 and 2 integrals), constant value.

Features

- RS-485 digital output (Modbus RTU protocol), with speed up to 3 Mbit/s;
- ability to collect samples (as part of a distributed system);
- measurement channel failure detection;
- identical location of power supply and RS-485 contacts for all versions;
- possibility of changing the program filters for high-pass and low-pass filters for the input signal.

Technical specifications

Interface

Input signal type

- TIK-CNV 1116 current 0-21.5 mA
- TIK-CNV 1216 charge ± 280 pCL
- TIK-CNV 1316 voltage ± 5 V
- TIK-CNV 1416 voltage 0-23.5 V
- TIK-CNV 15x6 thermal resistance

Output signal type RS-485 digital

Protocol Modbus RTU

Device power supply, V 16-30

Power consumption, not more, W 1.5

Design features

Overall dimensions, mm 108x12.6x113.6;
98.5x27x58.5

Weight, kg, not more than 0.2

Protection class IP20

Mounting type on DIN-rail

Reliability and manufacturer's warranties

MTBF, hours, not less than 20 000

Service life, years 10

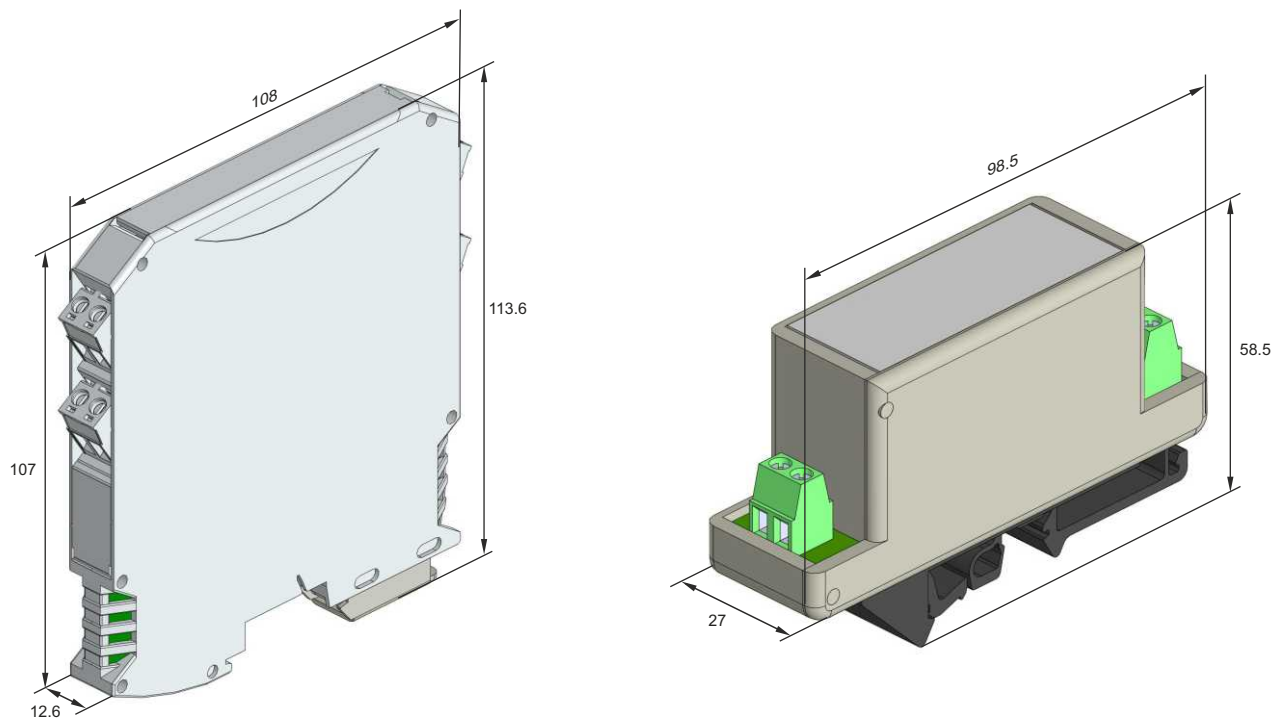
Warranty period, months 18

Performance

Operating temperature range, °C -40...+60

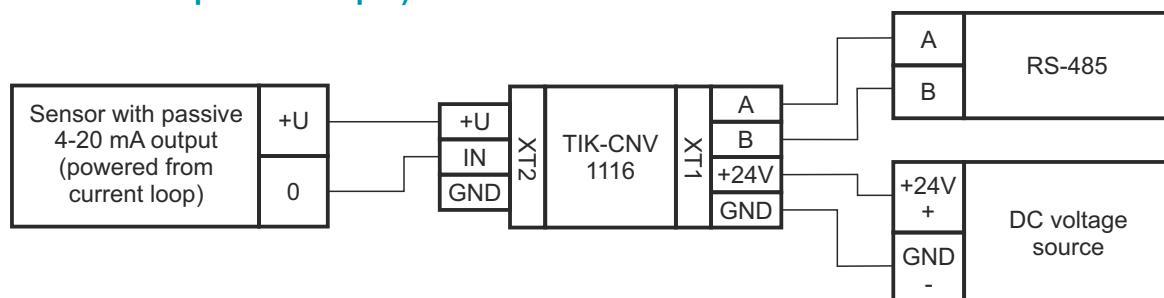


General view, overall and mounting dimensions



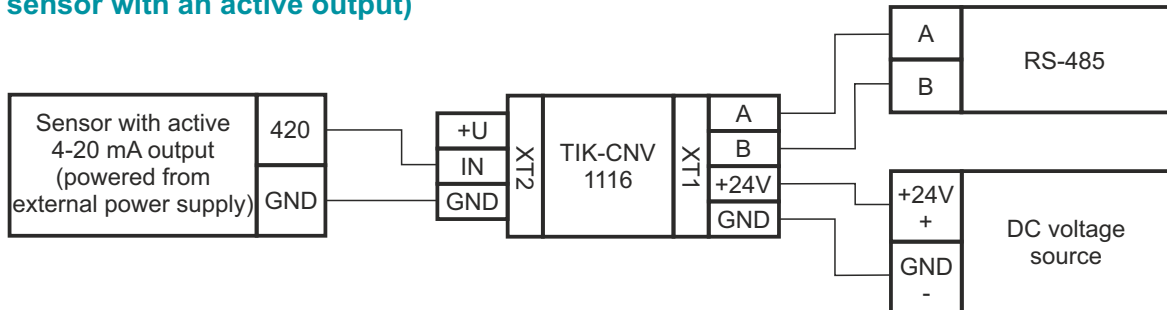
Wiring diagrams

TIK-CNV 1116
(for a sensor with passive output)

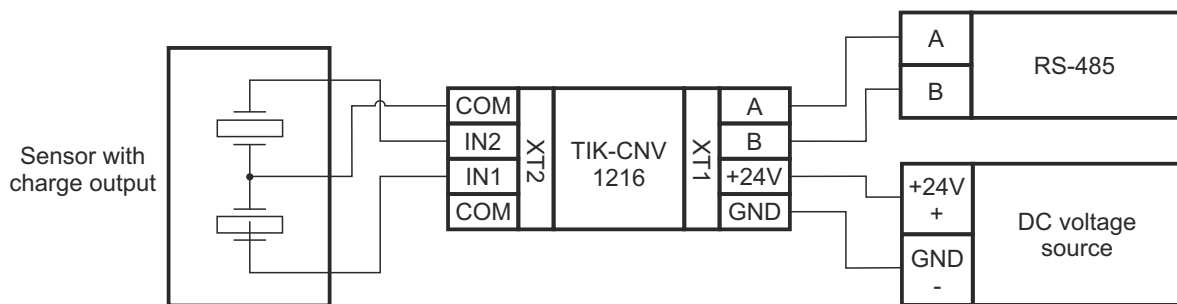


Wiring diagrams

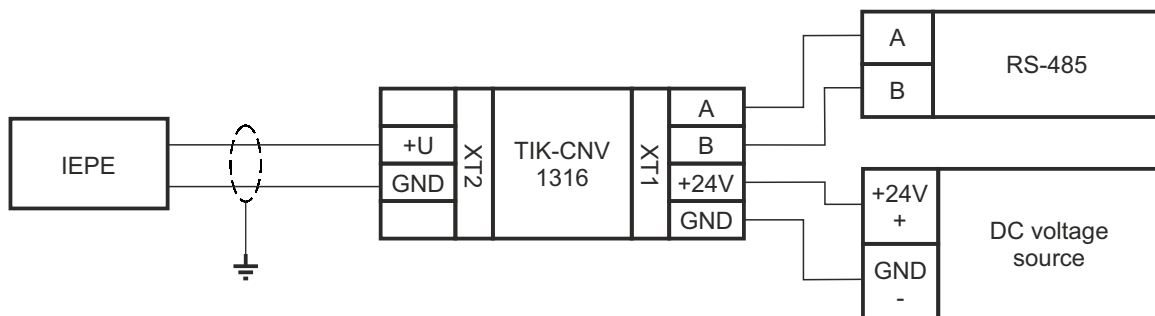
TIK-CNV 1116 (for a sensor with an active output)



TIK-CNV 1216



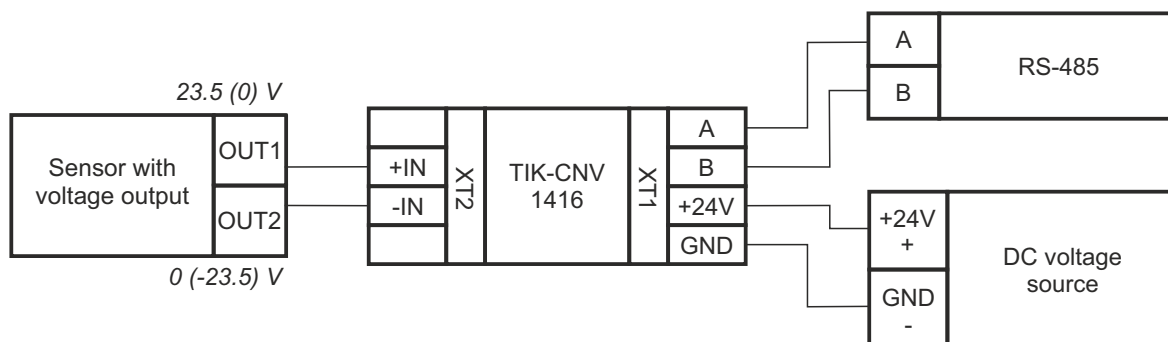
TIK-CNV 1316



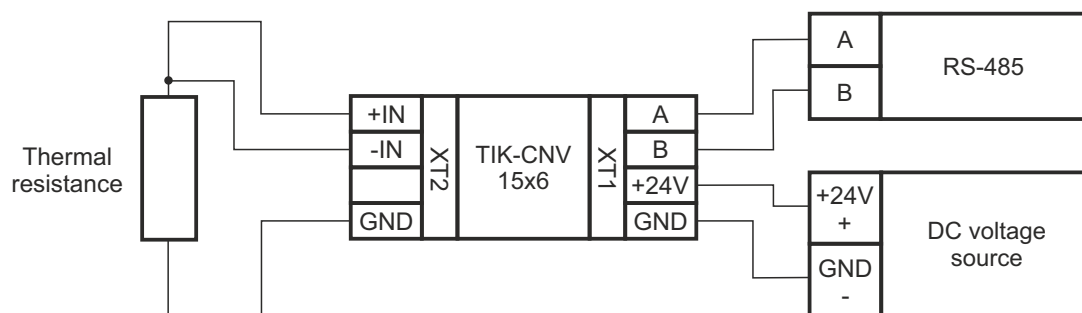


Wiring diagrams

TIK-CNV 1416



TIK-CNV 15x6





TIK Research & Production Enterprise,
Limited Liability Company
14A, Marii Zagummennykh St., Perm, 614067, Russia
Tel.+7 (342) 214-75-75
E-mail: tik@perm.ru
Web-site: <https://tik.perm.ru/en>