Metran-681
HART Modem

OKP code: 42 1821

● **Supports up to 15 devices connected to a single line**
● **Supply: PC serial port**
● **Intrinsically safe version:**
   - Explosion protection type "intrinsically safe electric circuit";
   - Explosion protection marking: ExiaIICT6X
● **Modem is not a measuring device**

Metran-681 HART Modem (further Modem) is designed to link PC or DPCS system means with Metran-100 Smart Pressure Transmitters, Metran-280 and -3051 Smart Temperature Transmitters and other HART devices.

It provides high reliability of data transfer. It is used with H-Master software or any other software for HART smart devices (AMS, Visual Instrument, etc.).

BASIC SPECIFICATIONS AND PARAMETERS

● HART signal sine-wave amplitude, frequency: 1200 or 2200 Hz, (0.3±0.1) V

● Input modem impedance (HART-input), min: 1100 Ohm

● Output modem impedance (HART-input), min: 700 Ohm

● The Modem detects HART signal at amplitude over 120 mV and does not respond to HART-signal at less than 80 mV amplitude

● Insulation between input circuits (HART input) and output circuits (RS232 output) withstands ac test voltage of 1500 V

● Electrical insulation resistance between input and output modem circuits under normal climatic conditions is no less than 40 MOhm

● Modem climatic type corresponds to UHL 3.1 per GOST 15150, but for operation at 0 to 50°C of ambient temperature and 90% of relative humidity at 35°C without moisture condensation.

● Modem stability to mechanical effects: vibration-proof version V1 per GOST 12997

● Modem keeps operable state, provides faultless data exchange between PCs and transmitter under variable magnetic field with frequency of 50 Hz and up to 400 A/m intensity

● Dust and water tightness: IP30 per GOST 14254

● Modem supply: serial PC port

● Overall dimensions: 22.5x75x120 mm

● Weight, max: 0.15 kg

MODEM DESIGN AND CONNECTION

Metran-681 HART Modem is in a plastic housing for DIN rail mounting (DIN-30).

Modem connection to PC is performed with DB9-DB9 connecting cable, included into the delivery set. Wires from transmitter (HART output) are connected to terminal block and fixed by a screw.

RELIABILITY

Average service life: 12 years
Mean time between failures: 50000 h.

WARRANTY

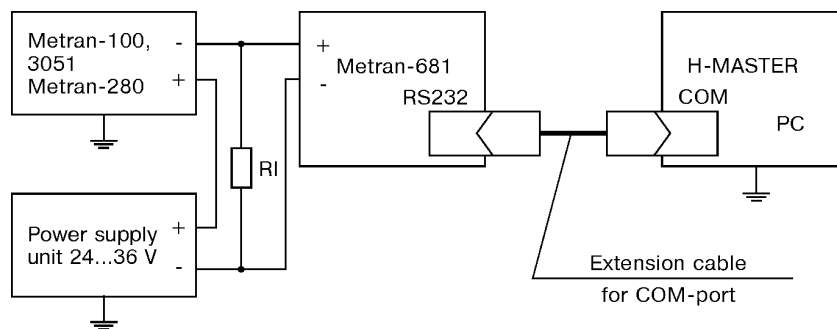Warranty period: 18 months from the date of commissioning.

DELIVERY SET

1. Metran-681HART Modem   1 unit
2. Product Data Sheet 681.01.00000 PS   1 copy
3. DB9-DB9 Connecting Cable   1 unit
4. Wire with Clips   1 set

ORDERING INFORMATION

Metran-681 - 01 - Ex - TU 4218-041-12580824-2002
1   2   3   4

1. Type.
2. DIN rail mounting style.
3. Explosion-proof version.
4. Specification.

EXTERNAL WIRING DIAGRAM

PC - Personal Computer,
RI - Load Resistance (displaying, registering device, etc.).