

TDS12301 **COOKIE AD univ. analogue IN + Voltage contact IN**



Miniature input interface with one universal analog input and one digital input. The digital input can be used to connect Voltage free contacts like from a push button, door- or window contact, presence detector, etc. (any brand). The analogue sensor input can be connected to sensors like T° sensor from a sauna, water T° , Ph or Chlore sensor of a swimming pool, wind speed sensor, etc... The following analogue signal types are supported:
0 - 5V, 0 -10V, 0 - 20mA, 4 - 20mA (with cable break detection alarm), PT100 sensor (3-wire) and the TELETASK T°, Light and Humidity level sensors.

APPLICATION

The COOKIE-AD input interface is designed to measure the signal of an analogue sensor and simultaneously read the contact input on the same interface. The compact housing is specifically useful for installations where space is limited and AUTOBUS is available. It also avoids that the sensor signal needs to be transported over long wires to the electrical board. The 4-20mA input has the advantage that in case of broken signal wire, the TDS system can detect this and takes action.

Important: It is not suited for measurement/control of processes, which could lead to danger for people and installations. Neither it is made to control industrial processes.

APPLICATION EXAMPLE

- (1) Light sensor in combination with a motion detector. Ex. Esylux PD-C 360i/8 mini UC (can be used for constant light control)
- (2) A wind speed sensor with 0V to 10V output .
- (3) A rainwater tank (e.g. content 10.000L) with an ultrasonic sensor (4-20mA output), ex. Type Sontay LS-UL3)
The total range of 10.000L divided with a resolution of 720 steps, gives 10.000/720 = 13,9L (see table below).

Remark 1: On the AURUS-OLED there is a display limit of six characters, so a maximum 99999 can be displayed.

Remark 2: The sensor signal should be linear with the tank content. This is correct in case of a rectangle tank. When used with a circular tank, the signal may not be linear. In this case it is advised to represent the value in height (percent).

IMPORTANT: Failure of the measurement (ex. Wind sensor is broken or cables are cut) can be the cause of danger and/or damage. For example, in case of a wind speed sensor, if defect or when a sensor wire is broken, your sunshades will not be withdrawn automatically at high wind speeds. To prevent damage, you will have to withdraw the shades manually. TELETASK is not responsible for damage caused by unattended failure or any other cause.

DISPLAY CAPABILITIES

AURUS-OLED (TDS12022xx)
AURUS-OLED XL(TDS12032xx)
OPUS (TDS12070)
Mobile app iSGUI

There is a maximum of 6 digits available for text to be displayed. The 6 digits include the optional “-“, “.” or unit symbol. Ex. “999999”, “-16.4C”, “-16.66”, “105kmh”

CHARACTERISTICS

Inputs

1 x voltage free contact (low frequency; max. 1Hz)
1 x analogue sensor input capable for reading values of TDS12250/TDS12251/12260/12270 and other sensor signals of 0-10V, 0-20mA, 4-20mA, PT100 (3-wire).
Input impedance 0-10V: 30kOhm

PT100 temperature range: -25° to 110°C

Heartbeat LED This LED reflects the working of the processor, the change of an input status and the communication with AUTOBUS and the central unit.

SETTINGS

Functions

With PROSOFT Suite 3.8.1.0 or higher

AUTOBUS address

Through rotary switches “Tens” + “Units”

Jumpers

Terminating resistor (supplied with the interface). To be used when the interface is at the physical end of the AUTOBUS cable.

Sensor input

Each type of sensor has separate connection, please consult schematic drawing below for correct connection

INSTALLATION

Indoor use only. Not applicable for DIN-rail mounting.

CONNECTIONS

AUTOBUS

AUTOBUS connector set (supplied with the interface). 12V (supplied by the AUTOBUS - minimum 9V) can be checked in PROSOFT diagnostics.

Digital Input

Wire, min. 0,2 and max. 0,5 mm², length max=2 meter

Sensor Input

Wire, min. 0,2 and max. 0,5 mm², length max=2 meter

POWER CONSUMPTION

Max. 15 mA

DIMENSIONS

42 W x 42 H x 16 D (mm)

NET | GROSS WEIGHT

0.018 kg | 0.040 kg

PACKAGING CONTENT

TDS12301
AUTOBUS connector set + termination jumper.

STORAGE

Temperature

-20°C to +65°C

Relative humidity

15% to 85%

IP PROTECTION RATE

IP20

POSSIBLE ERROR MESSAGES ON DISPLAYS (EX. AURUS-OLED TOUCH PANEL)

“data?”

No information from interface (check AUTOBUS connection)

“sens?”

Sensor not connected (TDS12250/12251 & TDS12260 only)

“wait.”

Interface is calculating first measurement

“loop?”

Broken cable (4-20mA only)

“pow?”

Short circuit in the power of the sensors

“error”

Wrong signal (ex. Wrong sensor or wrong settings)

OPERATING RANGE

Temperature

0°C to +50°C max.

Relative humidity

5% to 80% at 25°C (no humidity/condense)

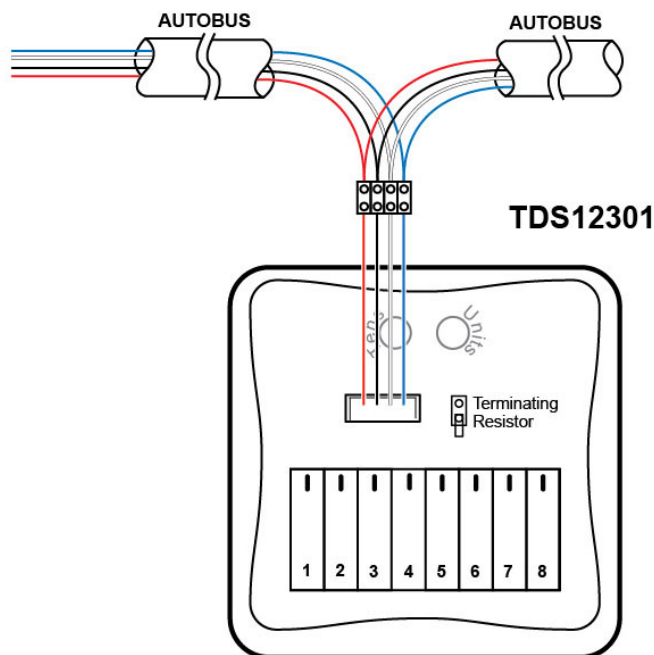
LIMITED WARRANTY

Four years

TABLE OF MEASUREMENT RESOLUTION AND PRECISION

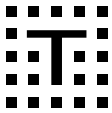
Signal:	Resolution:	Precision(@25°C):	Non Linearity:
0 – 10V	1024	± 3%	< ±1%
0 – 20mA	900	± 3%	< ±1%
4 – 20mA	720	± 3%	< ±1%
PT100	4095	+5%	<+1%
TDS Temp sensor	1200 (0,1°C)	± 1%	< ±1%
TDS Light sensor	200	± 10%	< ±1%
TDS Humidity sensor	100 (1%RH)	± 5%	< ±2%

SCHEMATIC DRAWING



- 1: GND/ COMMON
- 2: INP (Digital)
- 3: TDS
- 4: 0-10V
- 5: 4-20mA / PT100-A
- 6: PT100-A(S)
- 7: PT100-B
- 8: 12V

Note: Max. 200cm to sensor



SCHEMATIC DRAWING - EXAMPLES

