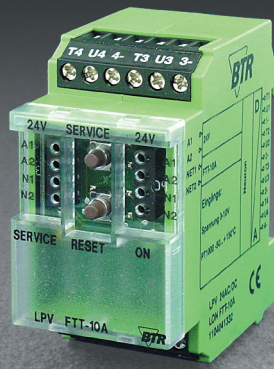


LON analogue input modules



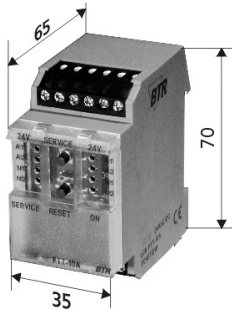
LPV 4

24 V AC/DC, 4 x 0 ... 10 V DC, 4 x Pt 1000

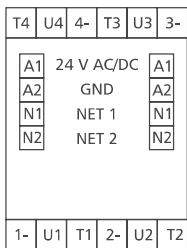
Part Number

110 404 13 32

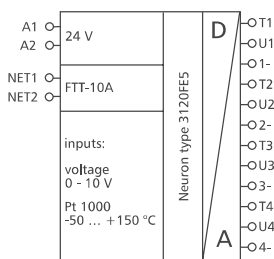
Dimensions - C12 housing



Wiring



Wiring Diagram



Use

LON module with 4 temperature and 4 voltage inputs. Suitable to collect temperatures with Pt 1000 sensors and voltages of e.g. electrical vent and mixing valves, valve positions etc.

Functional description

In a LON installation all 8 inputs can be scanned simultaneously by standard network variables SNVT.

LON interface

transceiver	FTT10A free topology
neuron	3120, 3k EEPROM
data format	standard network variables (SNVT)
transmission rate	78 kBit/s
max. length (see page 7)	
line topology	2700 m / 64 nodes
free topology	500 m / 64 nodes
cabling	twisted pair

Application software

Software updates only possibly by factory.

Technical data

Housing

dimensions w*h*l	35 x 68 x 60 mm
weight	84 g
mounting position	any
mounting	DIN rail according to EN 50022
material	housing + terminal blocks polyamide 6.6 V0
	cover plate polycarbonate
	housing IP40
	terminal blocks IP20
type of protection (DIN 40050)	terminal blocks IP20

Terminal blocks

supply and bus	pluggable terminal block 1,5 mm ²
	(terminal block and jumper plug are included to each packing unit)
	2.5 mm ²

Supply

analogue inputs	
operating voltage range	20 ... 28 V AC/DC
current consumption	67 mA (AC) / 24 mA (DC)
duty cycle	100 %
recovery time	550 ms

Input

temperature input for	platinum 1000 sensor
temperature range	-50 °C ... +150 °C
resolution	0.1 K
error	about ±0.1 °C
voltage input	0 ... 10 V DC
maximal	11 V DC
resolution	10 mV (0.0 ... 100 %)
error	about ±100 mV
input impedance	10 kΩ

Temperature range

operation	-5 °C ... +55 °C
storage	-20 °C ... +70 °C

Protective circuitry

operating voltage	polarity reversal protection
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Display

operation	green LED
function	yellow LED for status (service)

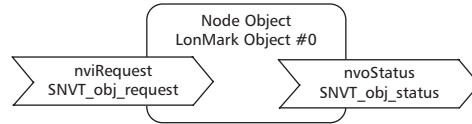
Note

The modules can be mounted in series without interspace. The max. number of modules connected in series is 15, each group needs an external power supply.

LON analogue input modules

Description of the LonMark objects and network variables

LPV 4
LPV 4 IP65



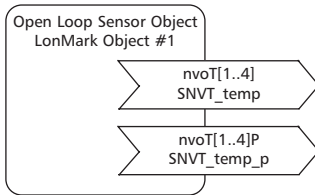
Node Object

The Node Object monitors and controls the functions of the different objects in the device. It supports the basic functions Object-Status and Object-Request required by LonMark.

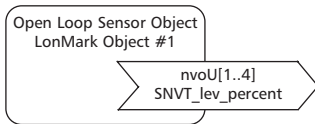
Application Objects

These objects contain the functions status record and data exchange.

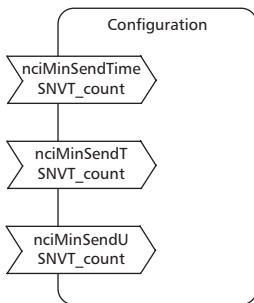
T Object (temperature)



U Object (voltage)



Configuration Variables



T Object (temperature)

nvoT[1..4] (index 2..5)

SNVT type

Function

SNVT_temp

Platinum 1000 temperature values between -50.0 °C and +150.0 °C are measured at the inputs and issued to the LON bus.

nvoT[1..4]P (index 6..9)

SNVT type

Function

SNVT_temp_p

See nvoT[1..4] but with 0.01 K issue.

U Object

nvoU[1..4] (index 10..13)

SNVT type

Function

SNVT_lev_percent

Voltages between 0 to 10.0 Volt DC are measured at the inputs and issued to the LON bus.

Configuration Variables

nciMinSendTime (index 14)

SNVT type

Function

SNVT_count

All output variables described above are issued even without status change at the end of a preset period of time. Thus the device reports periodically to the system.

Time settings

0 timer turned off

1 .. 60 timer time in seconds (factory setting 0)

nciMinSendT (index 15)

SNVT type

Function

Time settings

SNVT_count

Guaranteed interval between two temperature values.

0 timer turned off

1 .. 60 timer time in seconds (factory setting 0)

nciMinSendU (index 16)

SNVT type

Function

Time settings

SNVT_count

Guaranteed interval between two voltage values.

0 timer turned off

1 .. 60 timer time in seconds (factory setting 0)

Attention!

The variables AbC and AbM are specified for the input balance and are not be used.