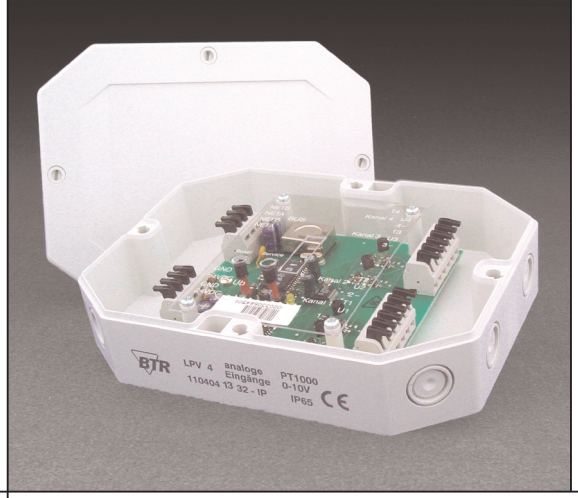
LON analogue input modules



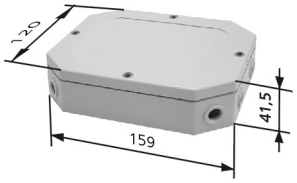
LPV 4 IP65

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

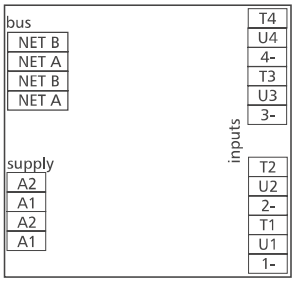
Part Number

110 404 13 32-IP

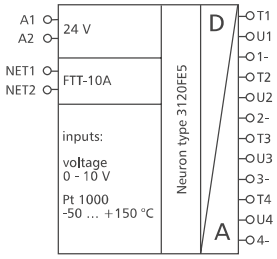
Dimensions - IP65 housing



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.

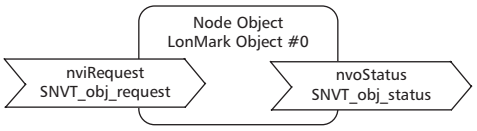
Technical data

Housing	dimensions w*h*l	159 x 41.5 x 120 mm
	weight	300 g
	mounting position	any
	mounting	directly to a smooth surface 8 cable entries for M12 and M16 fittings
	material	housing ASA+ polycarbonate terminal blocks polyamide cover polycarbonate
	type of protection (DIN 40050)	IP65
Terminal blocks	supply and bus	1.5 mm² pluggable
	analogue inputs	1.5 mm² pluggable
Supply	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
Display	operation	green LED
	function	yellow LED for status (service)

LON analogue input modules

Description of the LonMark objects and network variables

LPV 4
LPV 4 IP65



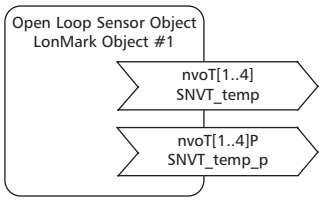
Node Object

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.

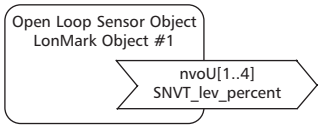
Application Objects

These objects contain the functions status record and data exchange.

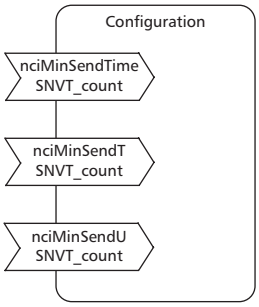
T Object (temperature)



U Object (voltage)



Configuration Variables



T Object (temperature)

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

SNVT type	SNVT_temp
Function	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	SNVT_temp_p
Function	See nvoT[1..4] but with 0.01 K issue.

U Object

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

SNVT type	SNVT_lev_percent
Function	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	SNVT_count
Function	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	SNVT_count
Function	Guaranteed interval between two temperature values.
Time settings	0 timer turned off 1 .. 60 timer time in seconds (factory setting 0)

nciMinSendU (index 16)

SNVT type	SNVT_count
Function	Guaranteed interval between two voltage values.
Time settings	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.