LON
door installation modules

Logline® LON

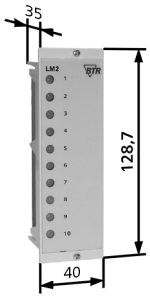
LA1

analogue data encoder, 24 V DC

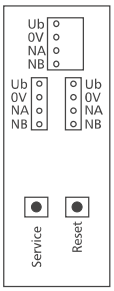
Part number

110 390 25

Dimensions - housing E19



Wiring



Use

Indicator and set point encoder module for 19" frames. Suitable as indicator and manual control of analogue signals in cabinet doors or remote control panels.

Functional description

In a LON installation the bar graphs and potentiometers are activated and/or analysed by the network variables SNVT.

LON interface

transceiver	FTT10A free topology
neuron	3120, 3k EEPROM downloadable
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

XIF and NXE files are available as downloads under **www.btr-electronic-systems.de**.

Technical data

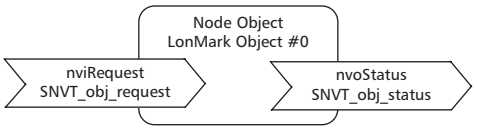
Housing	dimensions b x h x w	40 x 128.7 x 35 mm (3HE; 8 TE)
	weight	75 g
	mounting position	any
	mounting	in 10" or 19" frames according to IEC 297-3 (accessories page 88 P/N 110361 or 110362)
	material	housing ABS
	type of protection (DIN 40050)	IP20
Terminal blocks	supply and bus	1.5 mm² pluggable jumper plug (included to packing)
Supply	operating voltage range	24 V DC ±15 %
	current consumption	50 mA
	duty cycle	100 %
	recovery time	500 ms
Temperature range	operation	-5 °C ... +55 °C
	storage	-20 °C ... +70 °C
Protective circuitry	operating voltage	polarity reversal protection
Display	2 bar graphs	

BTR NETCOM

LON door installation module

Description of the LonMark objects and network variables

LA1



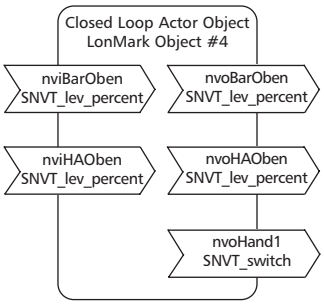
Node Object

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

The objects contain the functions bar graph indication and set point encoder.

K1 Object (channel 1)



K1 Object (channel 1)

nviBarOben (index 2)

SNVT type	SNVT_lev_percent
Function	control of the upper bar graph
nviBarOben = 0 .. 100 %	The indicated values are rounded. The following LED lights up if value is x6.

nvoBarOben (index 3)

SNVT type	SNVT_ lev_percent
Function	feedback to nviBarOben, value of nviBarOben is transmitted

nviHAOben (index 4)

SNVT type	SNVT_lev_percent
Function	automatic value of a control if the switch is set to “A” (11 o’clock) nviHAOben = 0 .. 100 %

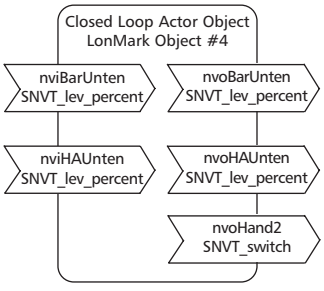
nvoHAOben (index 5)

SNVT type	SNVT_ lev_percent
Function	Feedback to nviBarOben, if the switch is set to "A" (11 o’clock). Value of nviHAOben is transmitted. nvoHAOben changes to 0, if the switch is set to "0" (12 o’clock). Value of nvoHAOben corresponds to the position of the potentiometer if the switch is set to "H" (1 o’clock).

nvoHand1 (index 6)

SNVT type	SNVT_switch
Function	If the switch is set to “A” (11 o’clock) nvoHand1 issues 100.0 1. In every other position 0.0 0 is issued.

K2 Object (channel 2)



K2 Object (channel 2)

nviBarUnten (index 7)

SNVT type	SNVT_lev_percent
Function	control of the lower bar graph
nviBarUnten = 0 .. 100 %	The indicated values are rounded. The following LED lights up if value is x6.

nvoBarUnten (index 8)

SNVT type	SNVT_ lev_percent
Function	feedback to nviBarUnten, value of nviBarUnten is transmitted

nviHAUnten (index 9)

SNVT type	SNVT_lev_percent
Function	automatic value of a control if the switch is set to “A” (11 o’clock) nviHAUnten = 0 .. 100 %

nvoHAUnten (index 10)

SNVT type	SNVT_ lev_percent
Function	Feedback to nviBarUnten, if the switch is set to "A" (11 o’clock). Value of nviHAUnten is transmitted. nvoHAUnten changes to 0, if the switch is set to "0" (12 o’clock). Value of nvoHAUnten corresponds to the position of the potentiometer if the switch is set to "H" (1 o’clock).

nvoHand2 (index 11)

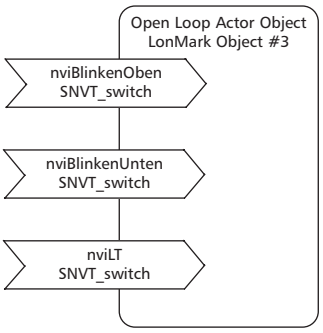
SNVT type	SNVT_switch
Function	If the switch is set on “A” (11 o’clock) nvoHand2 issues 100.0 1. 0.0 0 is issued in all other positions.

LON door installation module

Description of the LonMark objects and network variables

LA1

Extern Object



Extern Object

nviBlinkenOben (flashing) (index 12)

SNVT type	SNVT_switch
Function	flashing of the upper bar graph
nviBlinkenOben = 100.0 1	Value of nviBarOben flashes, this indicates that this value is an analogue fixed set point.

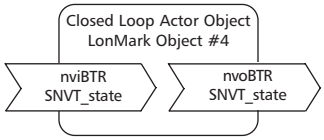
nviBlinkenUnten (flashing) (index 13)

SNVT type	SNVT_switch
Function	flashing of the lower bar graph
nviBlinkenUnten = 100.0 1	Value of nviBarUnten flashes, this indicates that this value is an analogue fixed set point.

nviLT (lamp test) (index 14)

SNVT type	SNVT_switch
Function	If nviLT gets value 100.0 1, a lamp test is carried out at the LA1 and nvoBTR.bit15 is set.

BTR Object



BTR Object

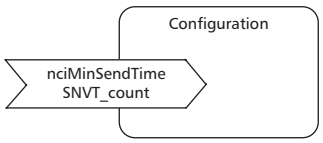
nviBTR (index 15)

SNVT type	SNVT_state
Function	System object for Logline LON door installation modules to provide simple connection to the annunciator module for signal collection LM1.
Bit0 .. Bit8	not used
Bit9	automatic operation in the system = 1; manual operation in the system = 0
Bit10	new failure signal in the system = 1; no or acknowledged failure in the system = 0
Bit11	new failure signal in the system = 1; no or unlocked failure in the system = 0
Bit12	maintenance signal in the system = 1; no or acknowledged maintenance in the system = 0
Bit13	unlocking signal of the LM1, is set to 1 by unlocking tact switch
Bit14	acknowledgement signal of the LM1; is set to 1 by the acknowledgement tact switch
Bit15	request of the LM1 for lamp testing; is set to 1 by the lampt test tact switch

nvoBTR (index 16)

SNVT type	SNVT_state
Function	feedback to nviBTR value of nviBTR is transmitted

Configuration variables



Configuration variables

nciMinSendTime (index 17)

SNVT type	SNVT_count
Function	All output variables nvo described above are issued even without a 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)