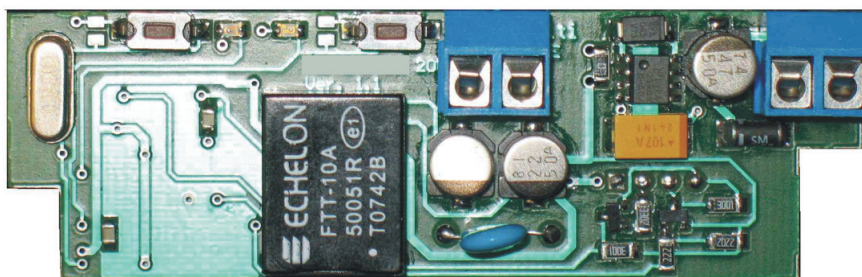


LONWORKS®

FTT-10A

Plug-in module for heat / cold meters
PolluTherm and PolluStat E

Order number: 68504857



Application

The LONWORKS® plug-in module is used to integrate the Sensus heat and cold meters PolluTherm1 and PolluStat E2 in LON systems (Local Operating Network).

The integration is done via a so-called Free Topology Transceiver (FTT). Through this the wiring scheme can be executed according to the particular local conditions.

It is possible to add the plug-in module at any time into the enclosure of PolluTherm or PolluStat E, both meters are equipped as standard with a corresponding socket.

LONWORKS® plug-in module



Example: installation in PolluTherm

Special features

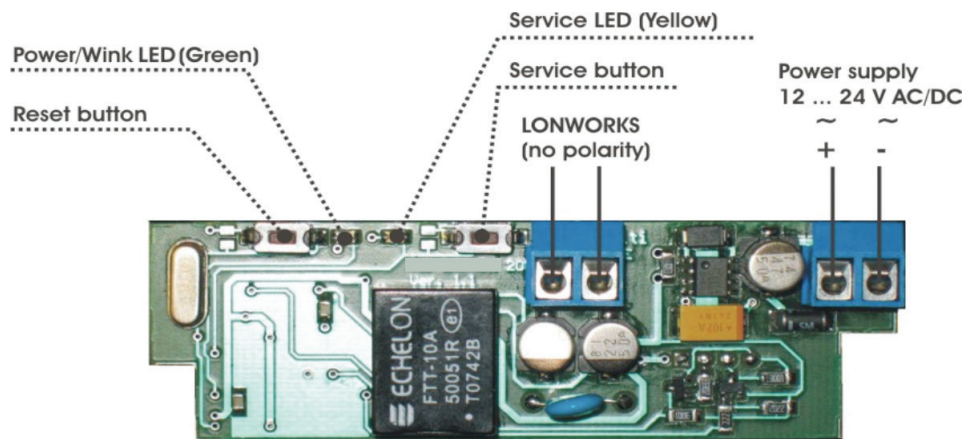
- ✓ Can be installed directly into the meter enclosure, no expenses for external installation work
- ✓ Besides the consumption related values also instantaneous values such as heating resp. cooling power, flow rate and temperatures will be transmitted
- ✓ Meters can be supplied by battery or mains
- ✓ The updating interval of the meter data can be chosen between 1 minute and 65534 minutes
- ✓ Possibility to choose between automatic transmission of the meter data or transmission only after an external request (polling mode)
- ✓ CD-ROM with configuration files and meter sealing material are in the scope of delivery

¹ Data sheets LH 6110 INT und LH 6111 INT

² Data sheet LH 4100 INT and LH 4110 INT

³ For meters with mains supply

Technical Data



- LONWORKS® FTT-10A (Free Topology Transceiver)
- Power supply: 12 ... 24 V AC (50 / 60 Hz) or DC
24 V AC supply can also be used to supply PolluTherm
necessary accessory: mains adaptor 24 V AC, order number 68504529
- Polarity of the pair of conductors for LONWORKS®-communication has not to be noted
- Power input: approx. 0.5 VA

Network topology and cable length

The permitted wiring length per segment depends on the network topology and cable type. Per segment up to 64 nodes can be connected; with a repeater a connection with up to 128 nodes is possible.

Examples for free wiring scheme (tree structure, star structure, ...) with single-sided ending:

Cable type	Maximum length from node to node (m)	Maximum length of whole network without repeater * (m)
J Y(St)Y 2x2x0.8	320	500
Belden 8471	400	500
LON-CNP EN 14908-2	450	450

* Values double with repeater

Examples for Bus-shaped wiring scheme with double-sided Bus-ending:

Cable type	Maximum length of whole network without repeater * (m)
J Y(St)Y 2x2x0.8	900
Belden 8471	2,700
LON-CNP EN 14908-2	2,700

* Values double with repeater

Overview of variables

Variable name	Variable type	Unit	Description
Node object variables			
nviRequest	SNVT_obj_request	-	Not used
nvoStatus	SNVT_obj_status	-	Not used
Configuration parameters			
nciReadTime	SNVT_time_min	min	Time between consecutive readouts of the heat resp. cold meter by the LONWORKS® interface. Available range: 1 to 65534 minutes / resolution: 1 minute When variable is set to zero, reading of heat resp. cold meter is stopped. The setting of this value depends on the energy supply of the meter. In case of battery supply this value shouldn't be below 15 minutes* (these meters have a limit concerning the daily amount of external data transmissions in order to avoid exhaustion of the meter battery during its calibration period). In case of mains supply 230 V AC or 24 V AC there are no limitations.
nciModeHrtBt	SNVT_time_sec	sec	Heart beat time period for automatic transmission of nvoFabNumber into the LON network. Available range: 0 to 6553.4 seconds / resolution: 0.1 seconds When nciModeHrtBt is set to zero, the heart beat propagation is disabled.
nciPollMode	SNVT_switch	-	Setting {0;0} Polling mode is switched-off; interface reads automatically heat resp. cold meter and transmits new values into the LON network according to the choosen nciReadTime period. Setting {100;1} Polling mode is switched-on; interface reads automatically heat resp. cold meter according to the choosen nciReadTime period but does not transmit automatically new values into the LON network; values are only transmitted in response to externally generated poll request.
Network variables			
nvoCustomerNo	SNVT_str_asc	-	Customer number
nvoEnergy	SNVT_elec_whr_f	Wh	Energy
nvoErrorCode	SNVT_state	-	Error code
nvoFabNumer	SNVT_str_asc	-	Fabrication number
nvoFlow	SNVT_flow_f	l/sec	Flow rate of heating resp. cooling liquid
nvoPower	SNVT_power_f	W	Heating resp. cooling power
nvoSupTemp	SNVT_temp_p	°C	Temperature in warmer pipe (supply pipe in case of heating, return pipe in case of cooling)
nvoRetTemp	SNVT_temp_p	°C	Temperature in colder pipe (return pipe in case of heating, supply pipe in case of cooling)
nvoTempDiff	SNVT_temp_p	°C	Temperature difference
nvoVolume	SNVT_vol_f	l	Volume

* If an interval below 15 minutes is required for battery supplied meters, a special battery can be used



Certified according to ISO 9001
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