МОДУЛИ ДЛЯ ПЕРЕДАЧИ ДАННЫХ

Технические характеристики

IF-LON

IF-LON
USB INTERFACE

INSTALLATION INSTRUCTIONS

GENERAL

Fig. 1. IF-LON (front)

The IF-LON LonTalk® interface can be used to connect your Honeywell BACnet controller.

The IF-LON supports not only the LNS Network Services Interface (NSI) for all LNS tools, but also the LonManager®-API interface on older applications.

Based on its Client-Server-Architecture, the LNS network operating system provides simultaneous access to highly diverse applications on the Network-Services-Server (NSS). As a result LonWorks® network tools provided from different manufacturers can be simultaneously implemented for installation, maintenance, monitoring and control.

By utilizing the IF-LON it is also possible to transform a PC or Notebook into an extremely efficient LonWorks® node. In this case, the LonWorks® application runs on the PC and the IF-LON handles the operation of the LonTalk® protocol. This provides much more processing power for a LonWorks® application, in comparison to a Neuron® chip based node. In addition, the number of possible network variables has been considerably increased from 62 up to 4096, which can frequently play an important role when it comes to maintenance and monitoring applications.

The IF-LON has an integrated FTT-10A transceiver for Free Topology and Link Power networks.
The IF-LON owns a Service LED and a State LED for visualization of the LonTalk®interface's state. For use with manual installations an external Service Pin button is provided.
All available drivers are included in the IF-LON Kit. Sample programs for accessing the driver with C/C++ and VisualBasic can be downloaded from:

SCOPE OF DELIVERY

- IF-LON device
- USB cable (0,8 meter)
- Technical documentation
  Mounting Instructions MU1Z-0974GE51

INSTALLATION

IMPORTANT

You must not shut down the operating system for the hardware installation of the IF-LON interface.

Hardware Installation

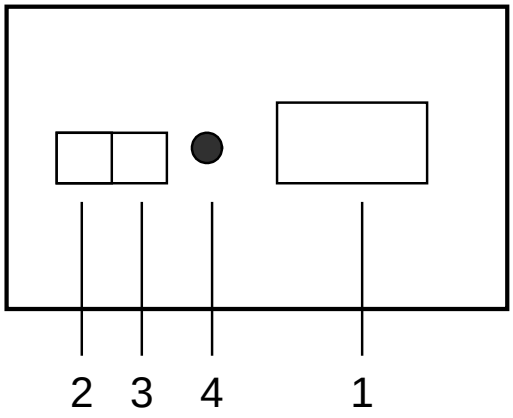

Fig. 2. IF-LON (left)

No.	Element	Function
1	LON network connector	2-pin: FTT-10A transceiver
2	„STATUS"LED (green)	Status of IF-LON interface
3	„SVC" LED (yellow)	Display of Service Pin Neuron Processor
4	Service Pin Button	Manual activation of a Service Pin message

For functions please refer to "Diagnosis By LED" section.

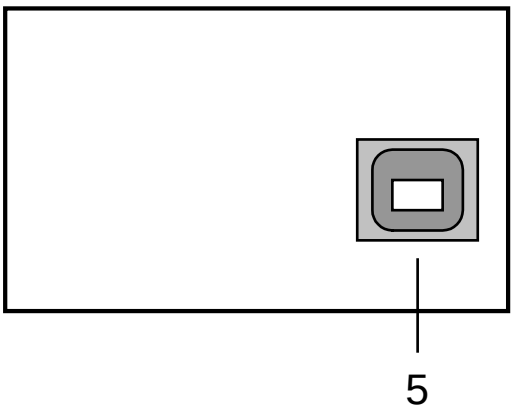

Fig. 3. IF-LON (right)

No.	Element		Function
5	USB connector		Please use supplied USB cable
	Pin	FTT-10A	
	1	NET B	
	2	NET A	
	4	not available	

1. Using the supplied USB-cable, connect the IF-LON interface to the USB port of the controller.
2. The "Found New Hardware Wizard“ starts. If you have installed CARE on a Windows 7 PC, normally no further user action is necessary. If you have installed CARE on a Windows XP PC, you will have to install usbnet. See CARE Installation Guides EN0Z-0964GE51, EN1B-0478GE51, and EN1B-0501GE51 for details.

De-Installation

1. Disconnect the IF-LON interface from the USB port. De-installation of driver software is not necessary.

DIAGNOSIS BY LED

The IF-LON interface (device) is fitted with two LED’s for visualisation. A green Status LED and a yellow Service-Pin LED. The yellow LED indicates the state of the Neuron Processor Service Pin line.

LED Mode	Function / Description
Green Status LED	
On	device is ready to use and device driver is properly installed
Off	device does not work properly or device driver is not properly installed or loaded or device is in Suspend mode
Yellow Service-Pin LED	
Constantly Off	Successful installation of the device (driver) and green LED is constantly On or Faulty installation of the device and if green LED is constantly off
Constantly On	Device hardware is faulty
Flash frequency1,25 Hz	Application has no access to the device (faulty driver installation)
Flash frequency ½ Hz	State of the device is „Unconfigured“, this means the device has no network address
Flashes for a moment	device has been reset via application command or a device test has been made via Properties window
State does not change	If application access is not possible probably no device driver has been installed.

TECHNICAL SPECIFICATION

Hardware

General Information

Bus Interface	USB conform, in accordance with USB specification Revision 1.1, 12 MBit/s
Network Connection FTT-10A	2-conductor Weidmueller connector with ten- sion clamp connection and screw flanges
Power Supply	Via the USB

Service Pin Function	Controlled by host or Service button
Configuration State	Displayed on host as well as via Service and State LED
Network Transceiver	FTT-10A
Network-Topologies	FTT-10A: Free Topology and Link Power
Power Supply Data	5 V DC, ±5%, 100 mA typical
Operating temperature	0°C to +70°C (+32°F to +158°F)
Non-operating temperature	-45°C to +85°C (-49°F to +185°F)
Maximum humidity	90%@+50°C (90%@+122°F), non condensing
EMI	EN55022 Level B, EN61000-4-2, EN61000-4-4, EN50140, EN50141
Listings	CE and FCC
Processor	Neuron® 3150 - Chip@10 MHz
Dimensions	123 x 66 x 30 mm (4.84“ x 2.68“ x 1.18“) (lenght x width x height)
Weight	100 g

The hardware of the IF-LON interface supports up to 127 interfaces per Universal Serial Bus in the PC (Multiple Device Support).

Technical Details

Connection to the Host System via USB:

Connection to the Universal Serial Bus follows USB-Specification Revision 1.1. The transmission rate is 12 MBit/s.

The IF-LON interface is completely compatible to Plug&Play.

LonWorks®-Network Interface

There are two different Transceiver variants for the LonWorks®-Network at disposal: Free Topology Transceiver FTT-10A (2 pin connector). The transmission rate of the FTT-10A Transceiver is 78,5 kBit/s.

Neuron Processor Core

A 3150® Neuron Processor with external storage interface is used. A reprogrammable Flash memory is used as program memory. A SRAM memory is used as data memory. The Neuron Processor is connected to the USB-Controller-module by the Neuron ‚Parallel IO Model'.

Address Register of the Neuron Processor

Type of memory	Address Zone	Memory Size
ROM-memory	0x0000 - 0xC2FF	49919 Byte (48.75 kB)
RAM-memory, read and write	0xC300 - 0xE6FF	9215 Byte (9.00 kB)
IO range for Interrupt-Generation	0xE700 - 0xE7FF	
Reserved Neuron® Processor intern	0xE800 - 0xFFFF	

Supported Transceivers

Generally the transceiver configuration does not have to be changed. If required, it can be changed in the Device Manager under Microsoft Windows Desktop operating systems. For operating systems like Microsoft Windows CE or Linux, the manual setting of the Transceiver ID into certain configuration files might be necessary. Find more information about this in the chapter „Driver Installation“ of the corresponding operating system. The register below shows the LON Transceiver IDs which are generally supported by the IF-LON interface.

ID	Name	Media	Network Bit Rate
04	TP/FT-10	Free topology/link power	78 kbps

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
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