



6100FP FTT to PL Router

Manual

Revision 1.2



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This Manual

This manual provides any required information for installation, configuration and operation of the 6100FP FTT to PL Router.

It exclusively treats the handling of this device. It neither describes the LonWorks technology by Echelon nor the LonMark profile implemented in detail. More specific information concerning these subjects can be found in the documentation of Echelon (www.echelon.com) and the LonMark Interoperability Association (www.lonmark.org).

The first part of this manual provides a survey about the device and its installation in chapters 1 to 3.

This manual is relevant for all variants of the 6100FP FTT to PL Router where applications for LonWorks system are implemented.

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1 Product Information

Functional Elements

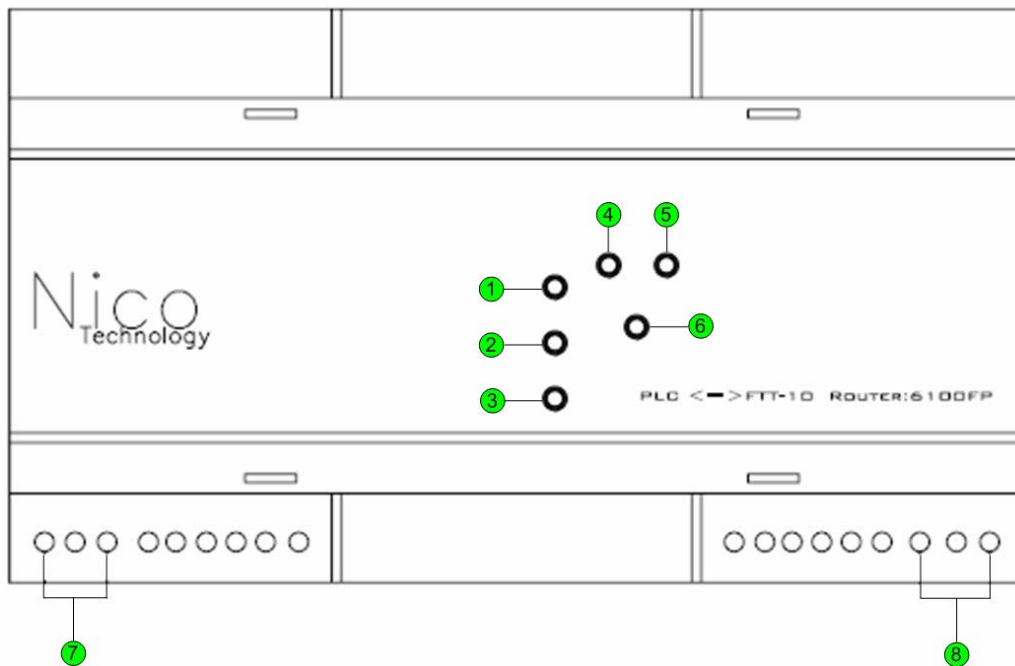


Figure 1.1 3010L Power Controller

No	Description
1	PKD LED indicator
2	BIU LED indicator
3	Power LED indicator
4	PL Channel Service LED indicator
5	FTT-10 Channel Service LED indicator
6	Service Pin button
7	Input AC power supply connection
8	Connect to LonWorks network

2 Installation

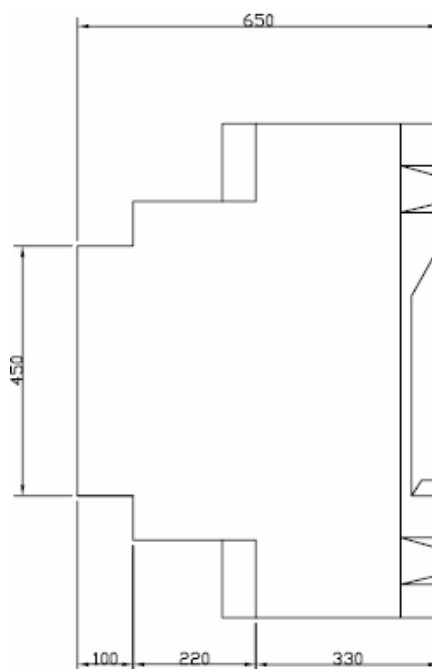
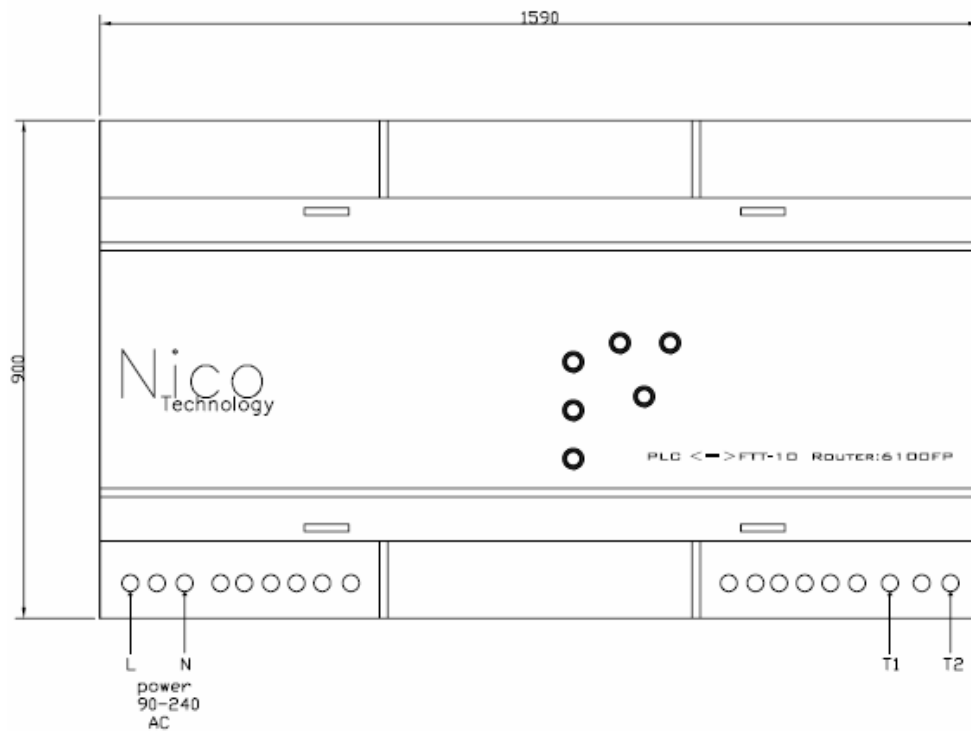
This chapter first describes the installation of the device; the installation of the configuration software is described in section 2.4.

Warnings

Attention

The device must be installed in compliance with the relevant DIN/VDE regulations or the relevant national standards. The connection to the supply voltage must be performed in accordance with VDE 0100 and VDE 0160 or the relevant national standards. Installation should perform by qualified and technical experienced personnel only.

Mounting



Connections

The 6100FP has to be connected to a 100-240VVpower supply and to the LonWorks network. According to the respective application peripheral equipment has to be connected to outputs.

Attention

Before connecting peripheral equipment the power supply device has to be switched off.

The connection is effected by means of the included plug-screw terminals.

Clamping range of the plug-screw terminals:

- High load connections (5.08mm grid, terminals **7**): 0.2 – 2.5mm
- Low voltage connections (5.08mm grid, terminals **8**): 0.2 – 2.5mm

The pin assignment of the connections is described in chapter 3.1, also containing wiring details.

Voltage

The 90~260 Volt connections are through connected in order to achieve easy wiring.

LonWorks Network

The connection to the LonWorks network is made by means of twisted-pair cables. The connection "shield" has to be connected to ground in order to achieve a reliable dissipation of over-voltage on the LON circuits.

Attention

The 6100FP input power supply must be same AC power phase when connect with LonWorks Power Line channel..

Software Installation

The configuration software of the 6100FP FTT to PL Router has to be installed by starting the program Setup.exe on the data carrier provided. It runs under Windows 9x/2000 and NT.

Download url: <http://www.nico-tech.com/download>

3 Device Description

The 6100FP is a FT to PL Router for LonWorks network traffic management. LonWorks Router Module providing the most used transceiver types. Allows for operation of extended networks where nodes are distributed into logical and physical structures. 6100FP is Indispensable for crossover between different transmission media channels.

LonTalk router major function is reduces the load in both connected partial networks, if data are mainly exchanged within the partial networks.

Parameter of the 6100FP is according to the LonTalk protocol specification. Thus the Nico Router can be configured with any network management tools that can parameter routers

Hardware Survey

The 6100FP disposes of one for Power Line Channel and one for FTT-10 channel to transmission data on LonTalk channel.

Operation and Display Elements

The 6100FP is fitted with a service button accessible via a small gap on the front panel (see Figure. 1.1, **6**). Activation of the buttons generates a service-pin message transmitted via the LonWorks network. The processor status as well as the service-pin status are displayed by the service LED (figure. 1.1.**4,5**), which is on while the service button is activated. By use the network management function Wink the service LED flashes.

Connection Pin Assignment

The following tables show the connector pin assignment of the individual connectors. Connection the **7,8** marking cf. Figure. 1.1 On previously page. In each clamp block pin 1 is situated on the left. For further wiring information see chapter 3.4.

LonWorks Network Connection

The double-core bus line can be connection either to **7** or to **8**. No polarity has to be considered by connecting the LonWorks network.

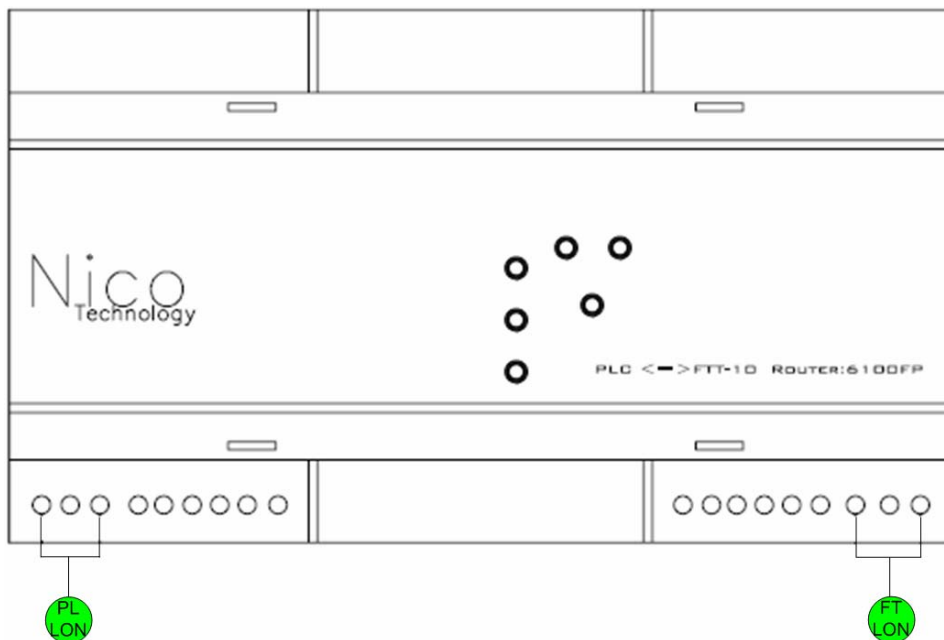


Figure 3.1 Connector pin assignment LonWorks network

Power Supply

The 6100FP has to be connected via connector 7 to 100-240VVmain voltage. Also see figure. 3.3.

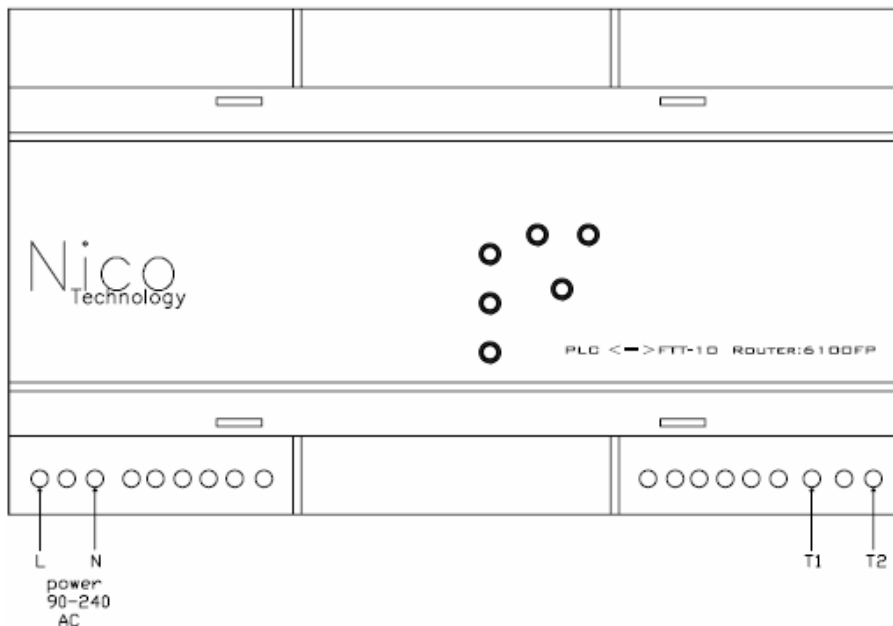


Figure 3.2 Connector pin for Power Supply

Wiring Diagram

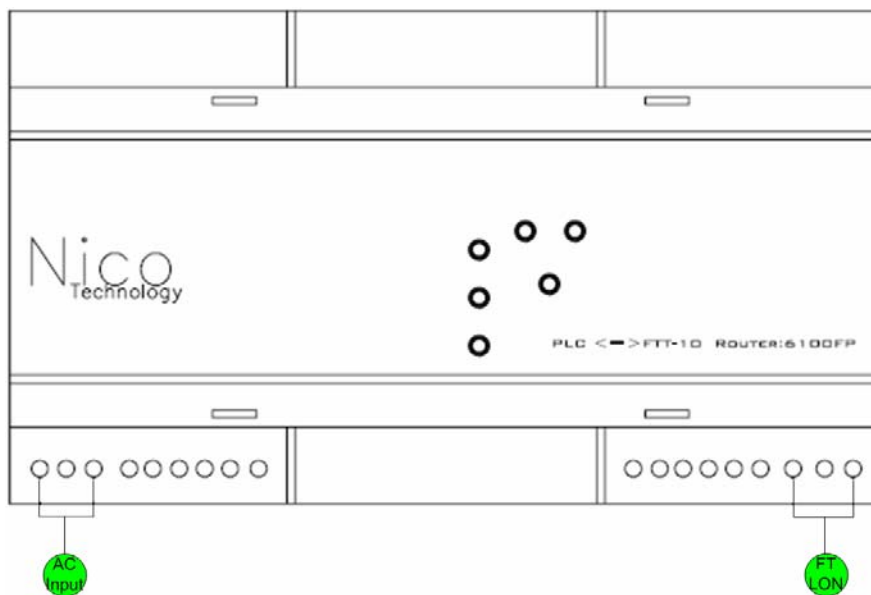


Figure 3.3 Connecting to 3008L

EMC

The 6100FP FTT to PL Router is a CE certified device according to the regulation 89/336/EEC for electron magnetic compatibility, modified by 92/31/EEC". Concerning the emission it fulfills classification B (living area) according to EN 55022A/B, EN 55011 A/B and EN 50081-1/2 and, concerning the interference sensibility, classification A (industrial area) according to EN 50082-2.

Technical Specifications

CPU	Echelon Neuron 3150,10MHz	
Memory	48Kbytes flash EPROM,8Kbytes SRAM	
LonWorks Transceiver	FTT-10A/FT-X1/PL-3150	
Power supply	100-240VAC	
Connection	Plug-screw clamp 0.2-2.5mm	
Temperature	Operation	0 ~ +50
	Storage	-20 ~ +70
Admitted relative humidity	5 ~ 93%, non condensing	
Dimensions	1590 x 900 x 650, DIN 43880, incl. clamps	
Mounting	DIN rail(EN 50022, 35 x 15)	
Display & Operation	Power, Service A-side , Service B side, packet indicator and Service Pin button	
I/O Channels	None	

Table 3.1 Technical Specification

Dimensions

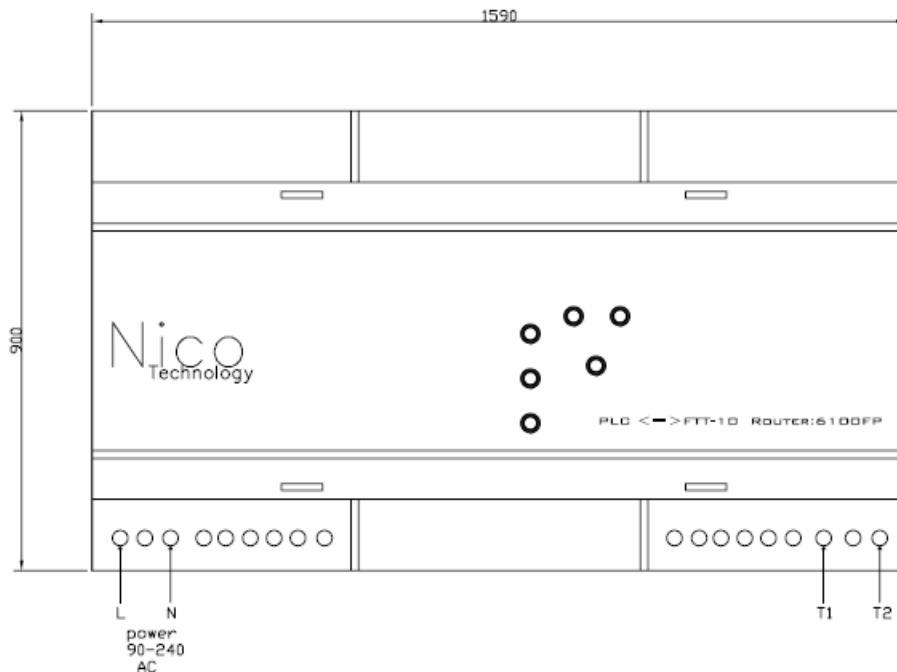


Figure 3.4 Device dimensions without plug-screw clamps