



**Installation Guide for LinMot USB-CAN Converter for
Configuration of E1100 Controller by CAN Bus**

Art. Nr. 0150-3134

CAN-USB Converter
Installation Guide

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Note

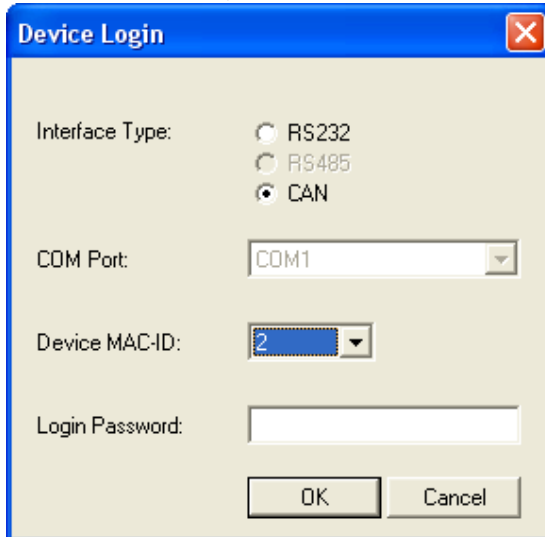
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1 Introduction

The USB-CAN converter can be used to login from a PC with installed LinMot-Talk 1100 software to one or more E1000 controller by CAN bus. It can help the user to debug and to configure the system in case the serial communication port is occupied (for example if the interface is LinRS).

A screenshot of a 'Device Login' dialog box. The dialog has a blue title bar with a red 'X' button. It contains four fields: 'Interface Type' with three radio buttons (RS232, RS485, CAN), 'COM Port' with a dropdown menu showing 'COM1', 'Device MAC-ID' with a dropdown menu showing '2', and 'Login Password' with a text input field. At the bottom are 'OK' and 'Cancel' buttons.

Device Login

Interface Type: ☐ RS232 ☐ RS485 ☒ CAN

COM Port: COM1

Device MAC-ID: 2

Login Password:

OK Cancel

The MAC-ID is selected by the two rotary HEX switches S1 and S2

2 Technical Data

Unit:	USB interface
CPU:	Microprocessor Siemens SAB-C165
Memory:	256 Kbytes SRAM
CAN connector:	D-Sub 9
PC connector:	USB connector

2.1 CAN connector on USB-CAN Converter – Pin assignment

The USB – CAN converter is equipped with a D-Sub connector that provides connection to the CAN bus conforming to the CAN High Speed Bus (ISO 11898).

DSUB 9 male:

Pin	Signal
1	N.C.
2	CAN_L
3	GND
4	N.C.
5	Drain connected to connector shield (1M/10n to isolated GND)
6	GND
7	CAN_H
8	N.C.
9	N.C.

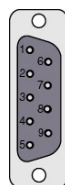
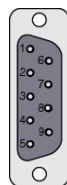


Table 2-1: Pinning of the CAN connector

2.2 CAN connector on LinMot Controller E1100

2.2.1 Pinout of the COM Connector:

DSBU 9 male:



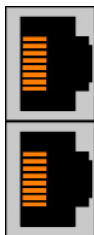
Pin 1	RS-485 Tx+	Pin 6	RS-485 Rx-
Pin 2	RS-232 TX	Pin 7	RS-485 Tx-
Pin 3	RS-232 RX	Pin 8	CAN L
Pin 4	RS-485 Rx+	Pin 9	CAN H
Pin 5	GND		

2.2.2 CAN Pinout of the CMD and ME Connector:

2xRJ45 with 1:1 connected signals. Standard twisted pairs: 1/2, 3/6, 4/5, 7/8.

Ethernet cables according standard

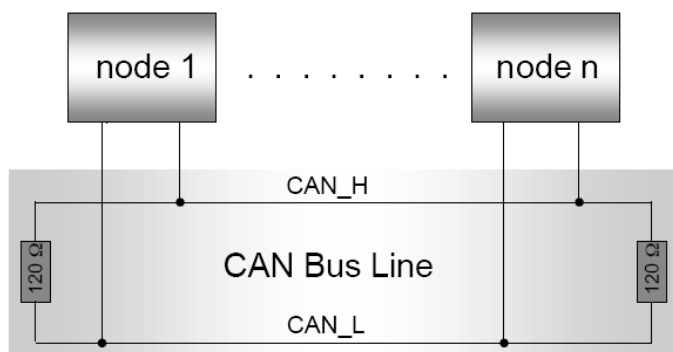
CMD Connector		ME Connector	
Pin 1	RS485 A	Pin 1	A
Pin 2	RS485 B	Pin 2	/A
Pin 3	RS485 Y	Pin 3	B
Pin 4/5	Ground	Pin 4	Z
Pin 6	RS485 Z	Pin 5	/Z
Pin 7	CAN H	Pin 6	/B
Pin 8	CAN L	Pin 7	CAN H
		Pin 8	CAN L



On E1100-GP Controller use ME Connector, on E1100-DP and E1100-RS Controller use CMD connector.

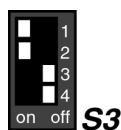
2.2.3 CAN Termination

The CANbus must be terminated by two 120 Ohm resistors at both ends of the bus line, according the following scheme:



For easy installation, the LinMot CANopen controller has built in termination resistors, which can be activated, if the LinMot controller is at the end of the bus line, and if there is no termination in the connector.

S3
ON – OFF
Interface
CAN Term
RS485 Term
RS485/232



The built in termination resistor for the CAN bus can be activated by setting the dip switch “CAN Term” to “ON”. If the dip switch Interface is set to “OFF”, the CANopen Interface is deactivated.

3 How to install the USB-CAN converter

3.1 System Requirements

To run the USB-CAN converter interface your PC must meet the following requirements:

- 100% IBM-compatible
- At least one available USB port
- Windows 2000 / XP running
- At least 1.5 MBytes free on hard disk

3.2 Installation

Note: Please before connect the USB-CAN converter to the PC install the LinMot-Talk 1100, the driver files are automatically copied on your PC.

After the installation of LinMot-Talk 1100 connect the USB-CAN converter to a free USB port.

3.2.1 Windows 2000

To enhance the stability of the system USB stack it is recommended to install Service Pack 2 for Windows 2000. Windows 2000 will search for the driver files and install the software for the USB-CAN converter automatically.

3.2.2 Windows XP

The “Found New Hardware Wizard” will be started after you have connected the USB-CAN converter to a free USB port. In the follow window choose the option “No, not this time”.



In the follow window, choose the option “Install the software automatically (Recommended)”. The software will be installed.

