EDL700: Energy Data Logger for EMS

How energy efficiency is improved

With numerous communication options and an integrated firewall, SAUTER energy data loggers (EDL's) are the ideal data capture devices. They allow all local measured data and meters to be recorded on site – reliably and economically – and independent of a building management system (BMS). The data is synchronised regularly with the EMS Server and the measurements can be protected for several days. This acts as a safeguard in the event that connection to the server is interrupted.

Areas of use

SAUTER EDL offers the possibility of connecting systems to the EMS server and benefiting from all the advantages of the software SAUTER EMS without having to use a building management system. Available in the "Cloud Computing " version (hosting package) or in the local version without hosting (system solution), SAUTER EMS is a complete solution for energy data management. The SAUTER EDL collector has the most diverse range of drivers for integrating your system. The drivers for BACnet/IP, Modbus (IP-RTU), M-BUS and KNX IP are already included in the basic version.

Keep your firmware always updated

SAUTER EDL include a software package regularly updated to include new features and improve existing features. Security is also and mostly a SAUTER concern for its customers and software upgrade package include security patches to keep the system as safe as possible. The yearly software maintenance option allows to be sure to always receive the last version for the EDL Software. This option can be activated for any EDL and at any time.

Options for more adaptability and flexibility

SAUTER EDL comes with a hardware and software configuration that meets the majority of requirements. However, with the advent of digital technologies, the need for intercommunication is increasingly large and complex. To meet these needs, SAUTER offers you a range of additional drivers in the form of software options. SAUTER EDL also has a specific location allowing you to add a hardware option to suit the constraints of your installations.

Features

- No moving parts
- No fan
- Memory on flash card
- Over Current protection
- Over Voltage protection
- ESD protection

Technical description

- Power supply: 9-48 VDC terminal block fitted with Phoenix screw terminals. Support AT/ATX power mode (Note: The power supply is not included in the delivery.)
- Power Consumption Typical 8.3W, Max.15W

Products

Type	Description
EDL700F001	EDL-700 EMS Energy Data Logger Hardware without Software
EDL700F002	(EDL) 10 EDL Datapoints from 1 to 100 DP
EDL700F003	(EDL) 100 EDL Datapoints from 101 to 1.000 DP
EDL700F004	(EDL) 1.000 EDL Datapoints from 1.001 to 10.000 DP

Hardware Options

Type	Description
EDL700F010	EDL-700 RS-232/422/485 Modul (2x DB9 connector)
EDL700F011	EDL-700 LTE-, HSPA+, GSM-Modem

Software Options

Type	Description
EDL140F001	(EDL) Driver Wurm/IP Refrigeration Systems *
EDL140F002	(EDL) Driver Danfoss Refrigeration Systems *
EDL140F003	(EDL) Driver Elreha Refrigeration Systems *
EDL140F004	(EDL) Driver SNMP (Simple Network Management Protocol) *
EDL140F005	(EDL) Driver SQL (Database Connection) *
EDL140F006	(EDL) Driver SAIA-S-Bus IP (UDP)*
EDL140F007	(EDL) Driver Siemens Simatic S5/S7*
EDL420F001	(EDL) Software maintenance per year from delivery
EDL420F004	(EDL) Software maintenance reinstatement per month since the delivery

*Driver availability depending on EDL Firmware version (details on EDL driver datasheet)

Technical features

Power supply

Supply voltage	9-48 VDC
Power consumption	8.3W (typically) 15W max.

Interface, communication

Ethernet	2x 10/100/1000 Mbps (RJ45 Port)
COM	2x RS-232/422/485 (DB9)
USB	1x USB 3.0
	3x USB 2.0 (Typ A)
Drivers included in the licence	BACnet IP Modbus (TCP & RTU) M-BUS KNX-IP
Various	Chassis Grounding Protection
Display	1 x Display Port DVI-I

Architektur

Processor	Intel Atom E3826 Dual Core 1.46 GHz
RAM	4GB DDR3 1066/1333 MHz
Flash Disk	32GB mSATA

Permissible ambient conditions

Operating temperature	0 ~ 70°C
Humidity non-condensing	max. 95% at 40°C

Konstruktiver Aufbau

Type, holder	DIN Rail Mounting Kit
Dimensions L x H x W (mm)	150 × 105 × 56
Weight (kg)	0.86 kg

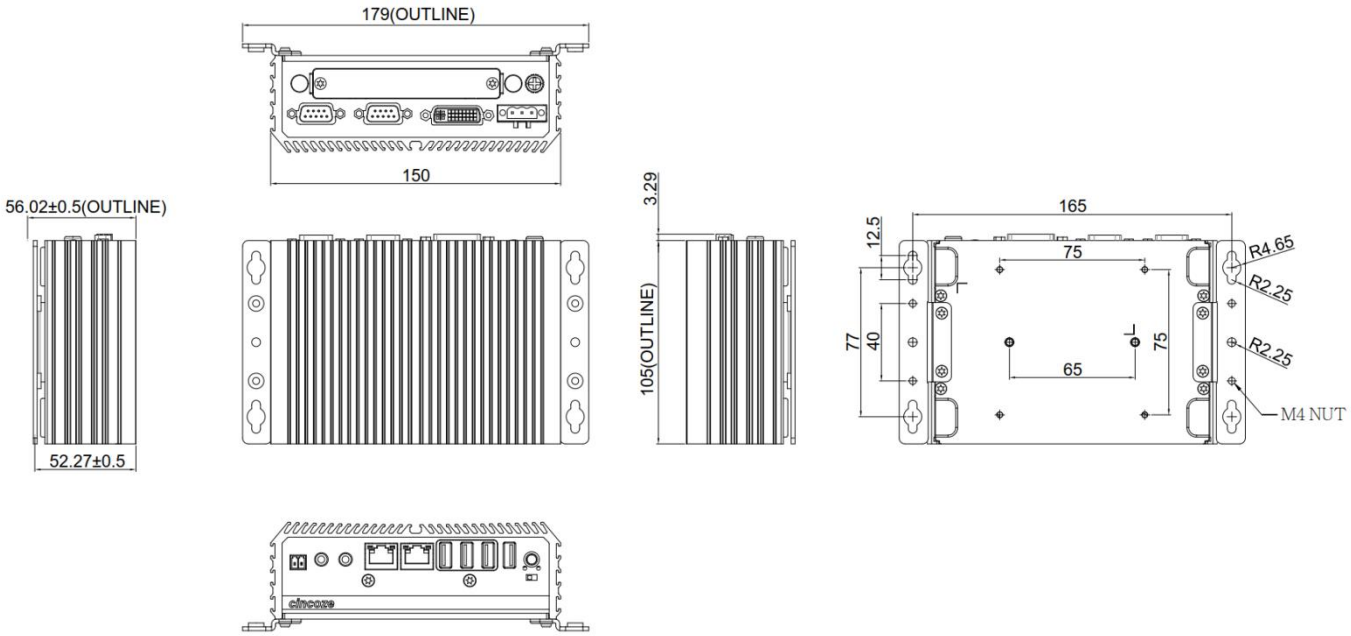
Certification	CE, FCC Class A

Comments on the project study

All drivers listed are included with the software and are activated via a license key. For all relevant data points alarms can be defined. Alarms can be kept in sync with EMS, so that acknowledge is possible on EDL or EMS. There is also the possibility to define time schedules. In addition, the EDL establish a VPN connection in order to meet the necessary security requirements for transmission of data over the Internet from remote locations.

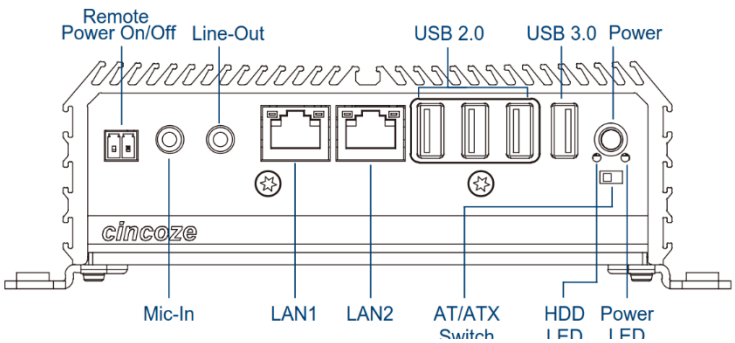
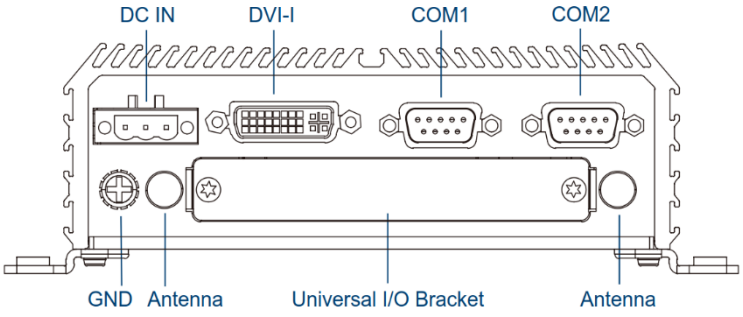
EDL configuration can be done via a dedicated development studio The EDL contains a full HTML5 Web Server allowing to configure, visualize data and monitoring the system from any device (Computer, smartphone or tablet).
Integration with the EMS server is completely prepared. An EMS administrator is being able to manage local users on EDL, upgrade remotely the EDL firmware and backup all EDL linked to the project automatically.

Dimension drawing (in mm)



Connection diagram

Front view of EDL700



Rear view of EDL700