



Eltex EYE Master Control Unit

Specifications and connection

General Description

Eltex Yarn Expert (EYE) is a very flexible and versatile yarn detection system. The functions and features of the Control Units, sensors and operator terminal are software controlled. Thus the system can be applied and configured for a great number of different machines and applications, e.g. tufting machines, creels, winding machines, heat set machines, etc.



The EYE Master Control Unit (MCU) 11700/11701 can handle up to 96 sensors (6 x 16 sensors).

The sensors are connected to the MCU via the 6 LIN inputs.

With EYE sensors the maximum number of eyelets is 864. With Compact sensors the maximum number of eyelets is 1536. When more positions are needed, Slave Control Units (SCU) can be installed.

The unit has six digital inputs and six digital outputs, plus two digital pulse inputs. The MCU can handle up to six different machines, each with individual start and stop signals.

Also available on the MCU are: a Modbus connection for operator terminal, a CAN bus for system expansion with SCU or connection of ETM Solo sensors, a MMC or SD memory card reader for data storage and software upgrades.

Model 11701 also has an Ethernet connection (RJ-45).

The SCU does not have digital inputs or Modbus connection.

There are two separate 24 V power inputs, one for the EYE MCU and one for the I/O section. If there is no need for isolated I/O, the power inputs can be interconnected (jumpers indicated in the connection diagram).

Specifications

Eltex part no.

11700 Master Control Unit
 11701 — " — (with Ethernet connector)
 11702 — " — For ETM EYE (ETM Solo sensors)
 11710 Slave Control Unit
 11720 — " — For EyETM (ETM sensors with multiple positions)

Supply voltage

24 V DC (18–30 V)

Current consumption

100 mA (MCU only, add connected loads)

Digital outputs

Maximum load

High = (I/O supply voltage - 1 V DC). Sourcing
 500 mA/output, total max. 2 A

Digital inputs

0–5 V DC = low, 15–30 V DC = high

Ambient working temperature

+5 ... +40°C

Casing

DIN rail box

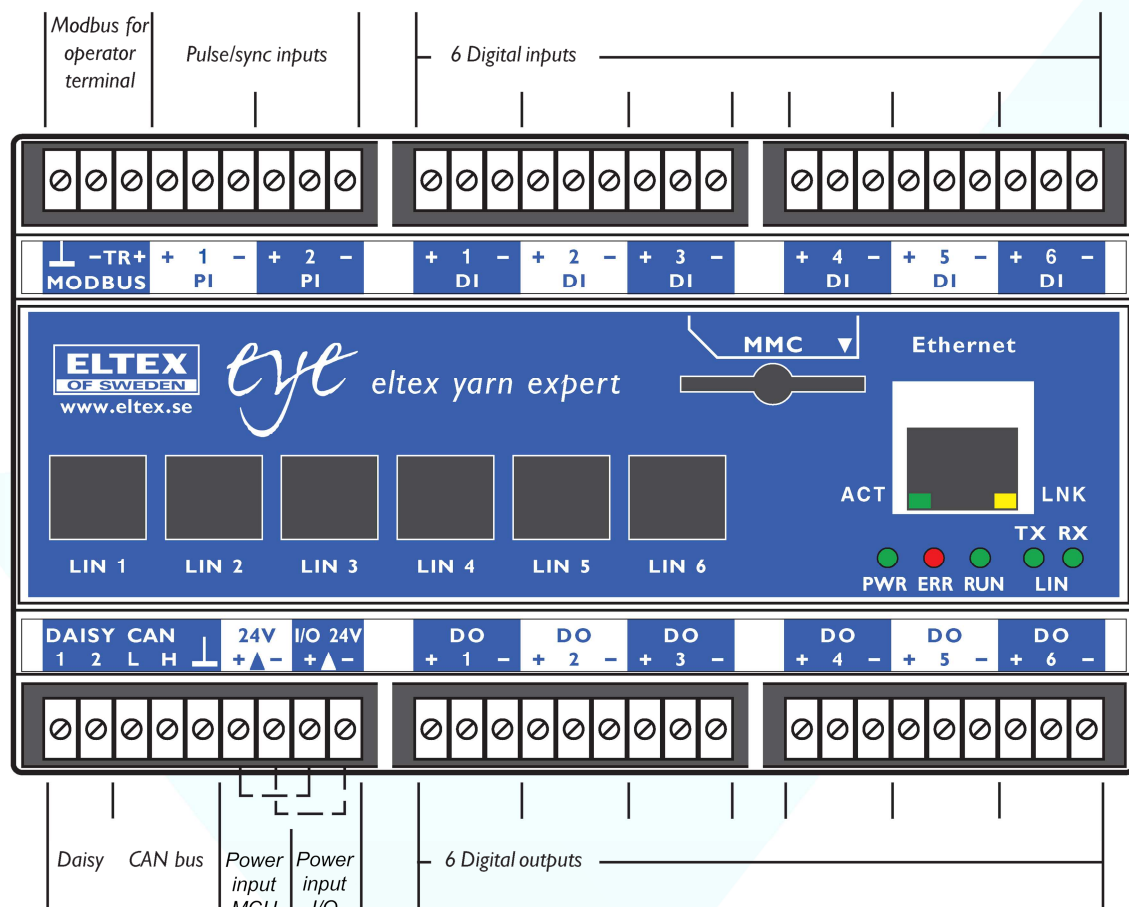
Dimensions

158 x 90 x 58 mm

Ethernet (EYE Control Unit 11701

LED	Colour	Indication
ACT	green	Network Activity/Diagnostic
LNK	yellow	Network Link

LED	Colour	Indication
PWR	green	Unit is powered up
ERR	red	Error indication
RUN	green	Run mode status
LIN TX	green	LIN bus TRANSMIT
LIN RX	green	LIN bus RECEIVE



6 LIN bus modular connectors RJ12



The LIN bus cable is connected with pin 1 to 1
Total cable length for one bus (max. 16 sensors) is maximum 30 m.

Declaration of Conformity according to the EMC Directive 2004/108/EC: EN61000-6-4, EN61000-6-2, EN55011/A2, EN61000-4-2/A2, EN61000-4-3/A1, EN61000-4-4/A2, EN61000-4-6/A1.

We reserve the right to modify the design without notice