

EASY



xLogic! CPU Built-in Ethernet

Reduce cost for you:

the well-proven logic module – now also with Ethernet interface

Micro Automation

Version: V 1.0

Easy Electronic Co., Ltd

- Standard Ethernet interface for communication with further xLogic/x-Messenger CPU or other automation Components.
- Also can be applied to be programmed or connected with easySCADA for building up a simple monitoring system.



Wish to reduce the cost for customers

The developmental leap forward can even be seen on the outside of our xLogic Ethernet CPU: All the previous communication ports are reserved, extra-added an Ethernet interface on the underside of the device.

Compare to use CPU plus Ethernet extension module, The CPU with Ethernet built-in will reduce the cost a lot for customers.

Flexible IO extensions

All ELC-E series extension modules which used for standard ELC-26 series CPU can be used with ELC-22 Ethernet CPU. expandable up to 94 DI, 88 DO, 26 AI, and 18 AO

All ELC12-E series extension modules which used for standard EXM-12 series CPU can be used with ELC-12 Ethernet CPU. expandable up to 40 DI, 36 DO, 36 AI, and 16 AO

Function extensions

- Astronomical clock
- Min./Max.
- Average value
- Analog filter
- Stopwatch
- Device Reset
- Comport status

New communication options

A. The networking is mainly used for direct communication between several xLogic devices. The advantages that result from this:

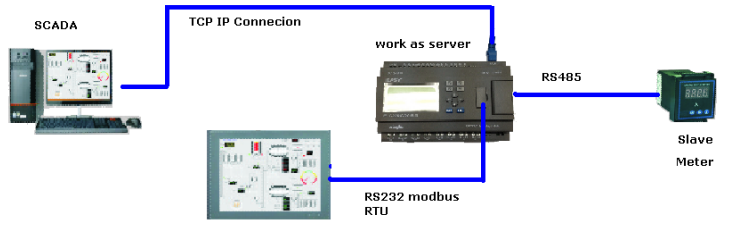
- Increasing the number of I/Os in a configuration. One CPU executes the program and the others only serve as an I/O expansion – without processing their own program. This means that a multi-cell layout in the control cabinet is now also possible.
- Expansion of the program memory. All logic modules process their own program and only exchange some of the data among each other.



B. Directly communicate with other brand automatic components via TCP/IP connection based on MODBUS TCP protocol.



C. Thanks to the modbus blocks we can play the CPU works as master or slave. Combined with RS232&RS485 ports to realize complex communication system.



Ethernet PLC(ELC-12) . The anatomy

Optional Power supply input
DC 12/24V

Input terminals-Optional signal:

A. Digital input : DC12/24V , AC110-240V

B. Analog input: DC(0..10V),
0/4..20mA, PT100(-50°C---+200°C)(Only available on extension)

Programming port:
RS232/USB/RS485;
CPU can act as either
Master or slave in modbus
network via such COM port

Expansion port/RS485 port;
Up to 8 expansions available;
CPU can act as either Master or
slave in modbus network via
such COM port.

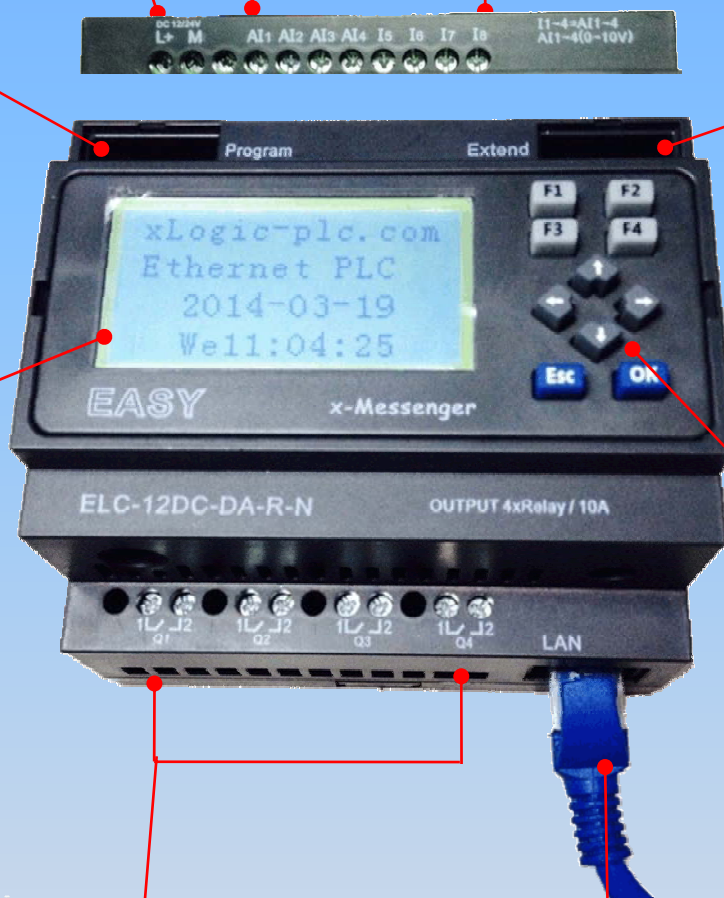
Detachable 4*16 LCD
displays :

- CPU RUN/STOP,
- Clock
- I/O status
- Parameters
(i.e analog
values, counters etc)
- alarming messages

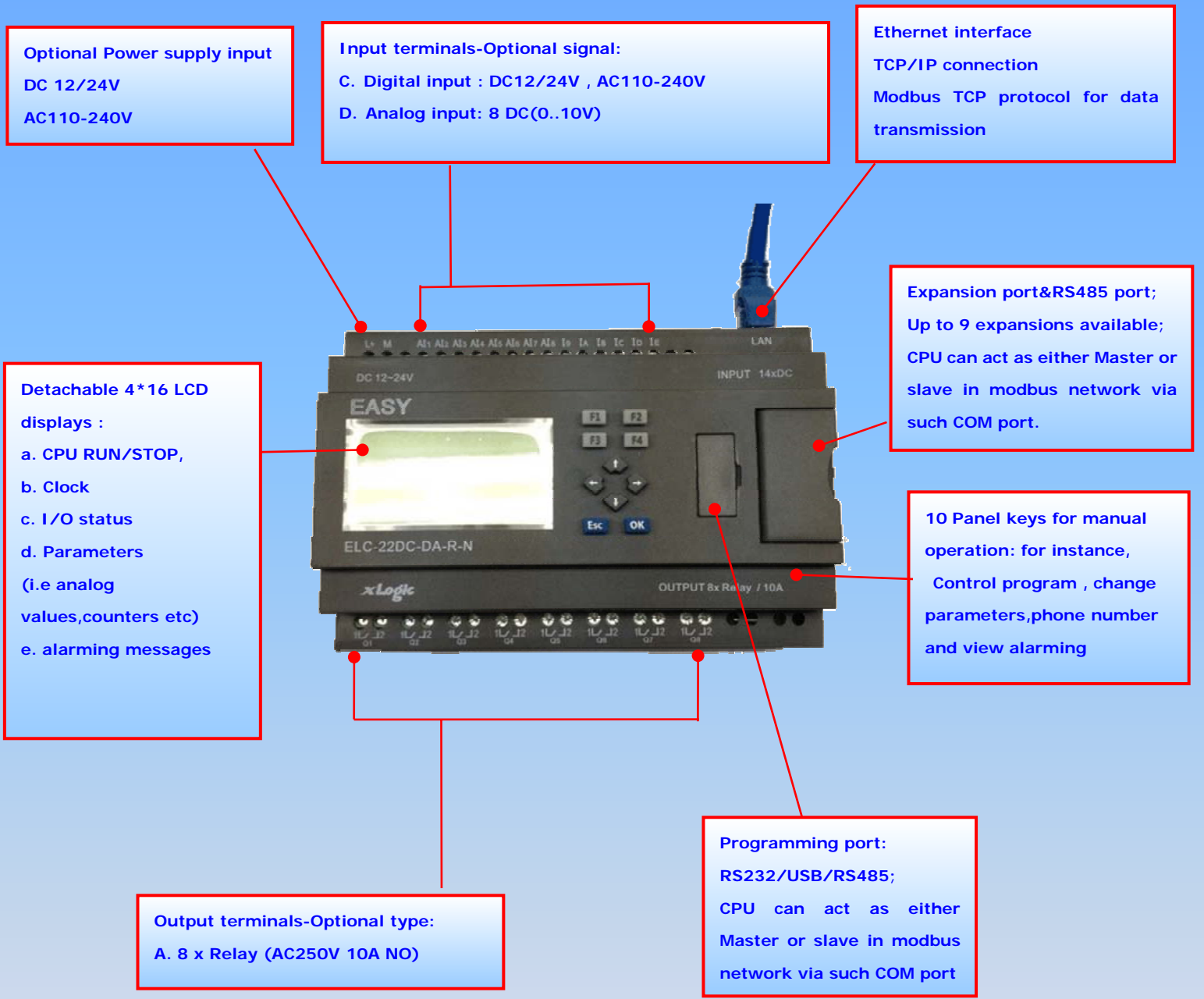
10 Panel keys for manual
operation: for instance,
Control program , change
parameters, phone number
and view alarming

Output terminals-Optional type:
A. Relay (AC250V 10A NO)

Ethernet interface
TCP/IP connection
Modbus TCP protocol for data
transmission



Ethernet PLC(ELC-22) . The anatomy



Technical specifications

CPU model	ELC-12DC-DA-R-N	ELC-22DC-DA-R-N
Power	DC 12--24V	
Input	8 Digital	14Digital
Analog input	4 (DC 0...10V)	8 (DC 0...10V)
Permissible range with signal "0" with signal "1" Input current	10.8 V ... 28.8 V DC Max. 3 V DC,1mA Max.8 V DC,1.5 mA	
Output	4 Relay	8 Relay
Continuous current	10 A with resistive load; 2 A with inductive load	
Short-circuit protection	External fuse required	
Switching frequency	2 Hz with resistive load; 0.5 Hz with inductive load	
RTC (real time clock)	Yes	
LCD panel	Yes (4*16 characters)	
PWM output	No	
High speed input	I5,I6(14KHZ); I7,I8 (60KHZ)	I9,IA(14KHZ); IB,IC (60KHZ)
Ethernet interface	Yes	
Data logger	ELC-MEMORY optional ;No SD card socket	
Communication port	1 RS232,1 Expansion port/RS485, 1 Ethernet	1 RS232, 1RS485, 1 Ethernet
Communication protocol	Modbus RTU/ASCII/TCP	
Expansion	Yes	
25°C RTC backup time	100 hours	
Ambient temperature	0 to + 55 °C	
Storage temperature	– 40 °C to+ 70 °C	
Degree of protection	IP20	
Certification	CE	
Mounting	On 35 mm standard mounting rail, 4 MW, or wall-mounting	
Dimensions	W x H x D (95*90*68 mm)	W x H x D (133*90*58 mm)

CPU model	ELC-12AC-R-N	ELC-22AC-R-N
Power	AC 110--240V /DC 160-260V	
Input	8 Digital	14Digital
Analog input	No	
Permissible range with signal "0" with signal "1" Input current	85 ... 265 V AC Max.40 V AC 0.03 mA Max. 79 V AC, 0.08 mA	
Output	4 Relay	8 Relay
Continuous current	10 A with resistive load; 2 A with inductive load	
Short-circuit protection	External fuse required	
Switching frequency	2 Hz with resistive load; 0.5 Hz with inductive load	
RTC (real time clock)	Yes	
LCD panel	Yes (4*16 characters)	
PWM output	No	
High speed input	No	
Ethernet interface	Yes	
Data logger	ELC-MEMORY optional ;No SD card socket	
Communication port	1 RS232,1 Expansion port/RS485, 1 Ethernet	1 RS232, 1RS485, 1 Ethernet
Communication protocol	Modbus RTU/ASCII/TCP	
Expansion	Yes	
25°C RTC backup time	100 hours	
Ambient temperature	0 to + 55 °C	
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