xLogic! CPU with Wi-Fi

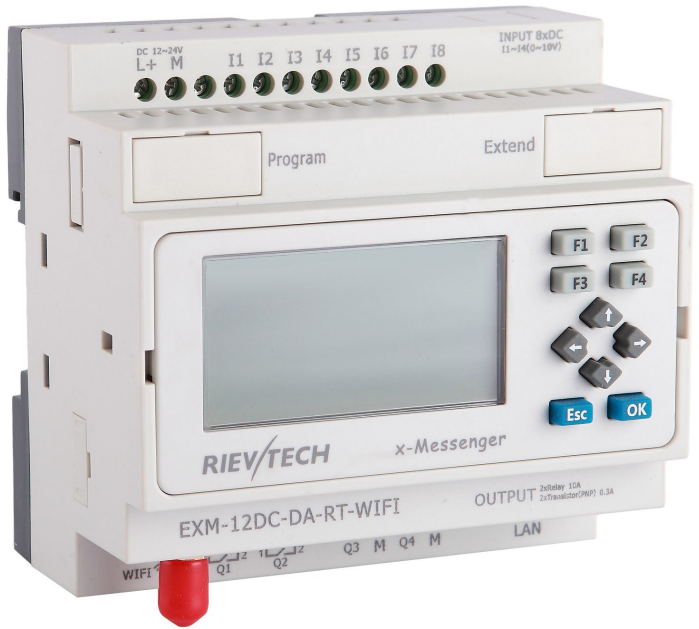**Ideal solution for wireless Ethernet connectivity:**

the well-proven logic module – now also with Wi-Fi

Micro Automation

Version：V 1.1

Rievtech Electronic Co., Ltd

- **Wireless Ethernet connectivity**
- **802.11b/g/n wireless standards**
- **RS232,RS485 with Modbus connectivity**
- **GSM&GPRS function optional**

Ideal solution for wireless Ethernet connectivity

Ideal solution for those projects that require Ethernet connectivity, but require this to be wireless as well, then our range of Wi-Fi programmable logic controllers may be just the solution. For extra connectivity, some of these   Wi-Fi PLC's also incorporate a GSM modem, which provides GPRS/SMS connectivity to your micro PLC control system. Meanwhile, our Android app (monitoring and control software for smart phone) can be perfectly applied to our Wi-Fi PLC.

Hence, you can expect to use your Android smart phone to remotely control and monitor your CPU.

### the well-proven Wi-Fi to UART modem built-in

- Support 802.11b/g/n wireless standards
- Support   TCP/IP/UDP network protocols
- Support work as STA/AP mode
- Support Router/Bridge mode networking
- Support Friendly Web Configuration Page(and also can be configured with eSmsConfig.
- Support Palmodic Signal, WIFI connection instruction Outdoor 100m with 3dBi antenna and indoor 40m;

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 wireless communication(based on the Modbus TCP protocol) between several x-Messenger devices.
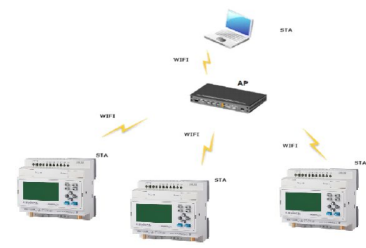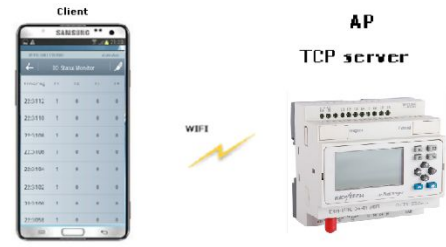

B.Directly communicate with other brand automatic components via TCP/IP connection based on MODBUS TCP protocol

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.

D.Android smart phone directly can be used to monitor and control the Wi-Fi PLC with xLogicApp.

Wi-Fi PLC-No GSM . The anatomy

Power supply input DC 12/24V

Input terminals-Optional signal:
A. Digital input : DC12/24V AC110-240(Only available on extension)
B. Analog input: DC(0..10V),
   0/4..20mA, PT100(-50℃---+200℃)(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 :
a. CPU RUN/STOP,
b. Communication status
c. I/O status
d. Parameters
(i.e analog values,counters etc)
e. alarming messages

10 Panel keys for manual operation: for instance, Control program , change parameters and view alarming messages
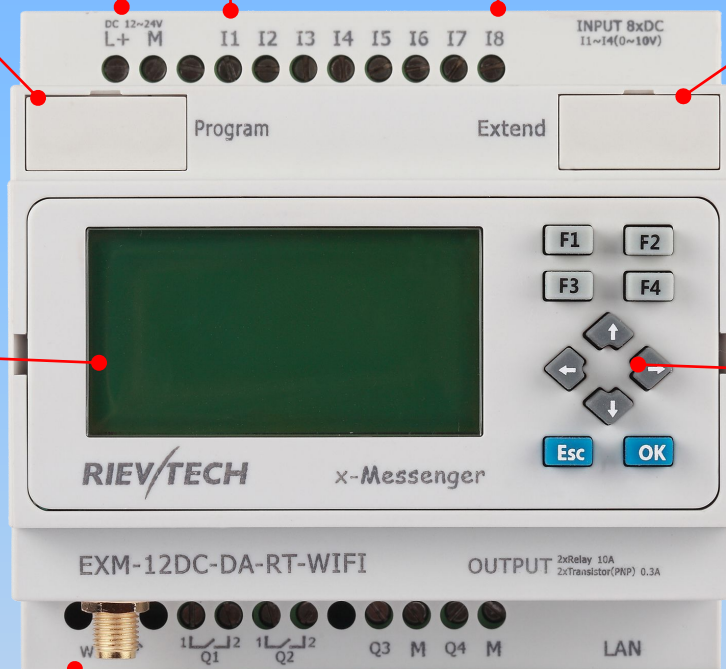
SMA connector for WIFI antenna

Output terminals-Optional type:
A. Relay (AC250V 10A NO)(Q1,Q2)
B. Transistor (PNP 0.3A)(Q3,Q4)

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

DC 12~24V
L+ M   I1 I2 I3 I4 I5 I6 I7 I8   INPUT 8xDC
                                       I1~I4(0~10V)

Program   Extend

F1 F2
F3 F4

Esc OK

RIEV/TECH   x-Messenger

EXM-12DC-DA-RT-WIFI   OUTPUT 2xRelay 10A
                              2xTransistor(PNP) 0.3A

W   1└┘2 1└┘2   Q3 M Q4 M   LAN
     Q1   Q2

Wi-Fi PLC-With GSM . The anatomy

Power supply input DC 12/24V

Input terminals-Optional signal:
C. Digital input : DC12/24V , AC110-240V
D. Analog input: DC(0..10V),
0/4..20mA, PT100(-50℃---+200℃)(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 :
a. CPU RUN/STOP,
b. GSM signal level,
c. GPRS Connection status
d. I/O status
e. Parameters
(i.e analog values,counters etc)
f. alarming messages

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

DC 12~24V
L+ M   I1 I2 I3 I4 I5 I6 I7 I8   INPUT 8xDC
I1~I4(0~10V)

Program   Extend

F1   F2
F3   F4

RIEV/TECH   x-Messenger

EXM-12DC-DA-RT-GWIFI   OUTPUT 2xRelay 10A
2xTransistor(PNP) 0.3A
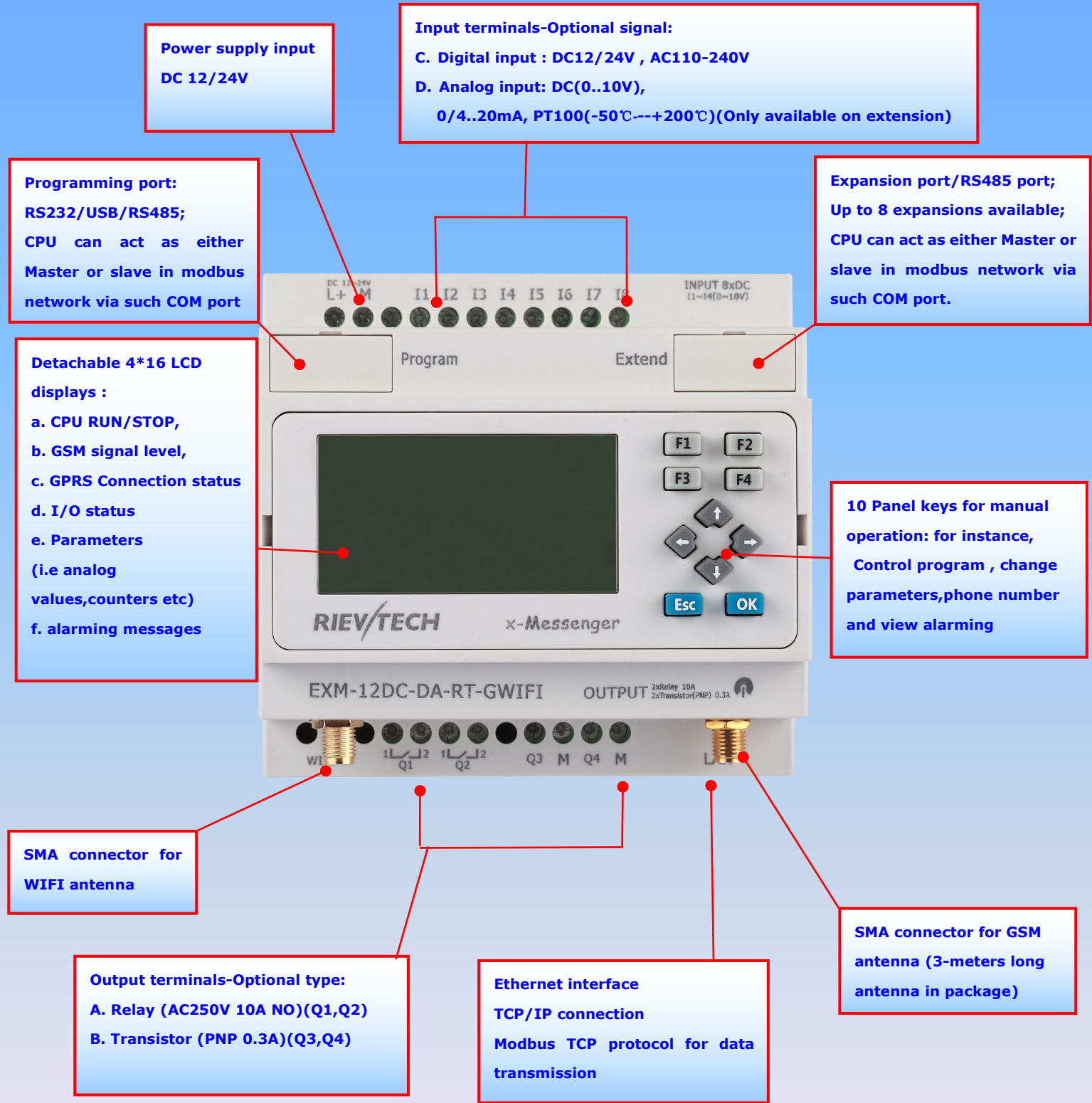
WI   1 2 1 2   Q3 M Q4 M   L
Q1   Q2

Esc   OK

SMA connector for WIFI antenna

Output terminals-Optional type:
A. Relay (AC250V 10A NO)(Q1,Q2)
B. Transistor (PNP 0.3A)(Q3,Q4)

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

SMA connector for GSM antenna (3-meters long antenna in package)

Technical specifications

CPU model	EXM-12DC-DA-RT-WIFI	EXM-12DC-DA-RT-GWIFI
Power	DC 12--24V	
Input	8 Digital	8 Digital
Analog input	4 (DC 0...10V)	4 (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	2 Relay +2Transistor(PNP)	
Continuous current	Relay:10 A with resistive load;2 A with inductive load Transistor: 0.3A	
Short-circuit protection	External fuse required	
Switching frequency	Relay: 2 Hz with resistive load; 0.5 Hz with inductive load Transistor: 1KHz	
Wi-Fi modem	Yes	
RTC（real time clock）	Yes	
LCD panel	Yes (4*16 characters)	
PWM output	Yes	
High speed input	I7,I8 (60KHZ)	
Ethernet interface	Yes	
Data logger	ELC-MEMORY optional ;No SD card socket	
Communication port	1 RS232,1 Expansion port/RS485, 1Ethernet/Wi-Fi	
SMS	NO	YES
GPRS	NO	YES
Communication protocol	Modbus RTU/ASCII/TCP	
Expansion	Yes	
25℃ RTC backup time	20days	
Ambient temperature	-20ºC to + 55 ºC	
Storage temperature	– 40 ºC to+ 70 ºC	
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)	
Weight	500g	
Support 802.11b/g/n wireless standards		
Support TCP/IP/UDP network protocols		
Support work as STA/AP mode		
Support Router/Bridge mode networking		
Support Transparent/Agreement Transmission Mode(Transparent used by EXM CPU)		
Support Friendly Web Configuration Page or configuration by eSmsconfig		
Outdoor 100m with 3dBi antenna and indoor 40m		
FCC /CE Certificated		