

ERC6R01

Ethernet WIFI bridge router

1xRS232 + 1xRS485



Specifications

- ◆ IEEE 802.11 b/g/n WIFI
- ◆ Access point(AP) / Station(STA) mode
- ◆ 2.4 GHz WIFI frequency
- ◆ 10/100 Base-T Ethernet
- ◆ Active connection monitoring
- ◆ One RS232 and one RS485 ports
- ◆ RS232 port $\pm 15\text{kV}$ electrostatic protection (IEC6100-4-2 Air Gap Discharge, HBM)
- ◆ RS485 over voltage protection
- ◆ 1/8 RS485 unit load (max. 256 units)
- ◆ 300 bps-230400 bps adjustable serial port baudrate(RS485 max:115200bps)
- ◆ ERCManager application for setup
- ◆ Firmware update over Ethernet
- ◆ DC 6.5-30V supply
- ◆ TCP/IP, DHCP, UDP, ARP, ICMP(ping), DNS protocols
- ◆ 3 leds for indication
- ◆ 126,1x90,6x56,6 mm (width,length,height)

Benefits

- ◆ Used for communication of ethernet devices over WIFI networks.
- ◆ Bridge mode data transmission is transparent so there is no need for additional protocol usage.
- ◆ Bridge mode brings reliable and fast solution in the field.
- ◆ Any TCP connection is monitored for inactivity and in such case, connection is restored.
- ◆ Data can be redirected to onboard RS232 and/or RS485 ports.

Applications

- ◆ IoT
- ◆ Remote monitoring
- ◆ Protocol conversion

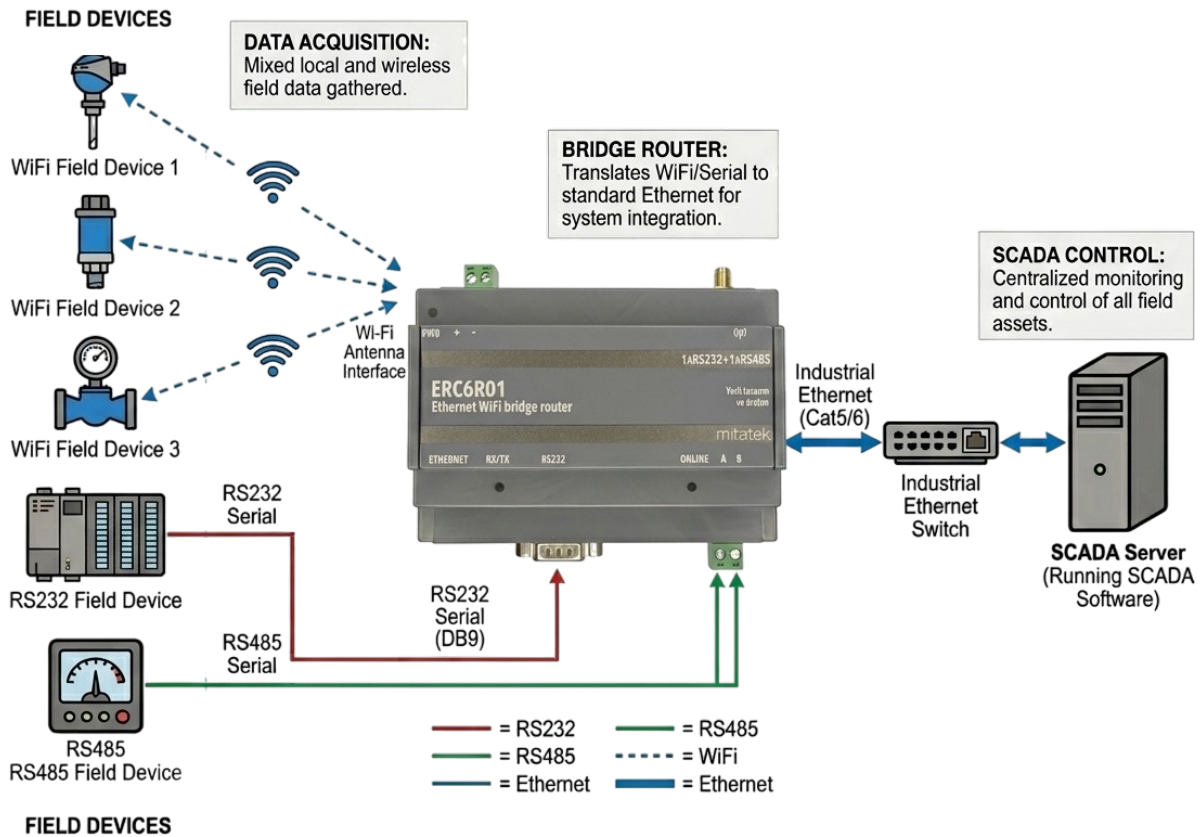
Technical info

32 bit 100 MHz CISC controller
-40- +85°C operating temperature
DC 6.5-30V supply
EN60950, EN55022, EN55024
5.08 mm screw terminal



Block diagram

Industrial Communication Architecture: Field-to-SCADA Gateway with ERC6R01



Serial port pinout(DTE)

Pin	Description	Pin	Description
1	DCD	6	DSR
2	RX	7	RTS
3	TX	8	CTS
4	DTR	9	RI
5	GND		

Electrical values and operating conditions

Value	Min	Max	Notes/description
Supply	6.5	30	V(DC)
Temperature	-40	85	°C
Current	50	400	mA (@ 5V supply)
Ethernet	10Base-T	100Base-T	-
Baud	300	230400	bps (RS485 max:115200bps)
Ethernet overvoltage protection	-	2250	VDC
Serial protocol	7-8 Databit, None-Even-Odd Parity, 1-2 Stop Bit		

WIFI	2.4 GHz, 802.11 b/g/n, 20 MHz bandwidth, 13 channels
WIFI Security	WPA/WPA2-Enterprise/Personal, WPA2 SI, WPA3 SAE, OWE
Maximum client connection in AP mode	10
Controller type	32 bit CISC
Controller speed	100 MHz
Modbus TCP simultaneous connection	5

Documents

Value	Name
ERC6R01 series user manual	MT_ERC6R01_KK_01i

Order code

ERC6R01	Ethernet WIFI bridge router
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