

ERC6W41

**WiFi serial device server
Modbus TCP Gateway**

**ERC6WX1 series
4xRS232 + 1xRS485**



Specifications

- ◆ Serial device server(WiFi)
- ◆ Modbus RTU/TCP conversion(WiFi)
- ◆ IEEE 802.11 b/g/n WiFi
- ◆ Access point(AP) / Station(STA) mode
- ◆ 2.4 GHz WiFi frequency
- ◆ 10/100 Base-T Ethernet(setup&upgrade)
- ◆ Active connection monitoring
- ◆ Four 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)
- ◆ ViCom Virtual serial port software
- ◆ 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 serial devices over WiFi networks.
- ◆ When used in device server mode, data transferred transparently so there is no restriction for any protocol.
- ◆ When used in protocol converter mode, any Modbus RTU device connected to any serial port, controlled and monitored via Modbus TCP protocol over WiFi interface.
- ◆ Any TCP connection is monitored for inactivity and in such case, connection is restored.
- ◆ With free virtual com port software, old applications with COM only communication feature can be used.
- ◆ Any PC without serial port becomes capable of using in monitoring/SCADA applications.

Applications

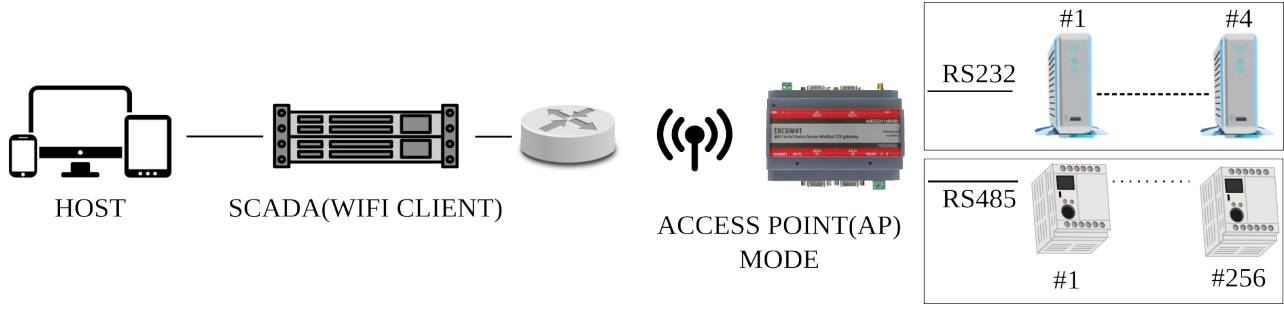
- ◆ IoT
- ◆ Remote monitoring
- ◆ Protocol conversion

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



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	30	100	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
ERC6WX1 series user manual	MT_ERC6WX1_KK_01

Order code

ERC6W41	4xRS232 + 1xRS485 Serial device server/Modbus TCP gateway
---------	---

Copyright 2026 by Mitatek Elektronik. All rights reserved. No portion of this document may be copied, photocopied, reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of Mitatek Elektronik.

© 2002-2026 Mitatek Elektronik. All rights reserved.



Mitatek Elektronik Tasarım Müh. San ve Tic. Ltd. Şti.
Mimarsinan Mah. Çavuşbaşı Cad. Ceren Sok. N.12 D.5 34782
Çekmeköy/İstanbul/TÜRKİYE
+90 216 316 11 15 – +90 216 521 33 78(fax)
www.mitatek.com.tr mitatek@mitatek.com.tr