

# GRC5000

## LTE/4G Ethernet/WIFI Bridge Router

1xRS232 + 1xRS485



### Specifications

- ◆ LTE data service for GSM
- ◆ Dual SIM interface
- ◆ 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
- ◆ One RS232 and one RS485 ports
- ◆ RS232 port  $\pm 15$ 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)
- ◆ RouterManager application for setup
- ◆ Firmware update over Ethernet
- ◆ DC 6.5-30V supply
- ◆ TCP/IP, DHCP, UDP, ARP, ICMP(ping), DNS protocols
- ◆ 4 leds for indication
- ◆ 126,1x90,6x56,6 mm (width,length,height)

### Benefits

- ◆ Used for communication to serial, WIFI, ethernet devices over GSM data service.
- ◆ Data transferred transparently so there is no restriction for any protocol(Bridge router mode).
- ◆ No external access point needed when setting up a WIFI network.
- ◆ Industrial operating temperature for GSM applications.
- ◆ Active connection monitoring for stable TCP connections.

### Applications

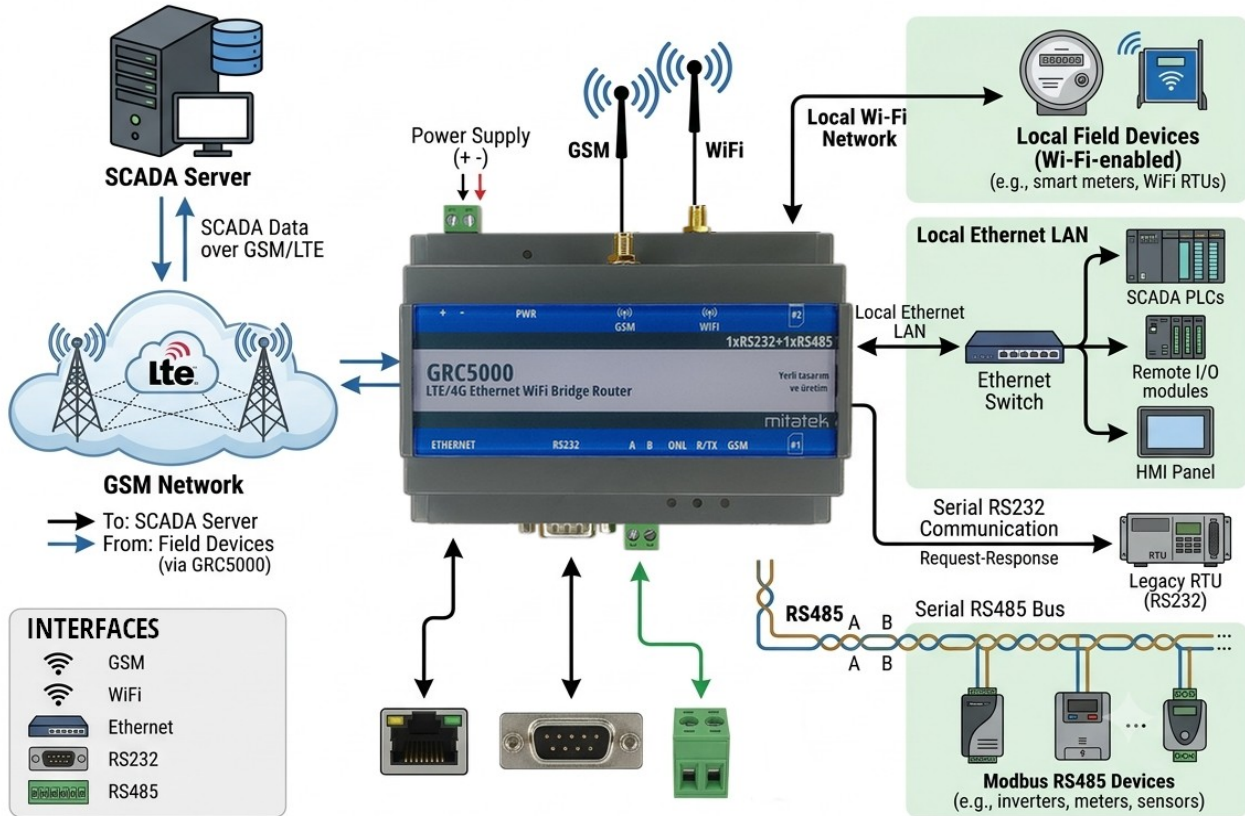
- ◆ IoT
- ◆ Remote monitoring
- ◆ SCADA

### 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	300	2000	mA ( GSM burst signal peak value)
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		

## Documents

Value	Name
GRC5000 user manual	MT_GRC5000_KK_01

## Order code

GRC5000	4G/LTE ETHERNET/WIFI BRIDGE ROUTER
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