

# ADGT 4G/3G GTR Router Series

GTR40, GTR30



Industrial Cellular  
Router Series for  
Industrial and M2M/IoT  
Applications

## PRODUCT OVERVIEW

Industrial router series designed to provide robust and high-speed wireless Internet access over 3G or LTE cellular network for industrial, M2M/IoT and commercial applications, including transportation, energy, smart grid, ATM, vending etc.

Linux-based OpenWrt operating system allows to create secure highly-reliable VPN networks and install user software packages to customize router configuration according to your applications needs.

GTR series includes the following model lines:

- **GTR30** – 3G router line (modem speed – up to 7.2 Mbps).
- **GTR40** – 4G router line (modem speed – up to 100 Mbps).

Routers are manufactured in robust aluminum enclosure and can be mounted on a wall or DIN rail.

## Application Areas:

- AMR/AMI systems, smart grids
- Small business, SOHO network
- Power and energy industry
- POS terminals, ATM, vending
- Security systems (alarm, warning, IP video surveillance etc.)



## KEY FEATURES

- 2 x Ethernet 10/100Base-TX (LAN/WAN)
- 2 x SIM card slots for channel redundancy
- 1 x USB A (Host/Device)
- 4 x I/O lines (support three operation modes)
- 1 x RS-232, 1 x RS-485. Modbus-TCP - Modbus RTU/ASCII conversion
- 1 x microSD memory card slot
- Temperature compensated real-time clock (RTC) providing high timekeeping accuracy
- Hardware Watchdog timer for router reboot in case of software failures
- Networking: OpenVPN, PPTP, GRE, IPSec, NAT, Firewall, IPv6, DHCP (Server/Client), TinyProxy, NTP, FTP, SIM manager, etc.

## ADDITIONAL OPTIONS

- GPS module for precise location determination and high accuracy time synchronization (up to 1 msec)
- Supercapacitor that provides router back-up power supply for two minutes in case external power supply is disabled



# GTR SERIES MODEL LINE

	High-Accuracy GPS Module	Supercapacitor
<b>3G Router Models</b>		
GTR30	—	—
GTR30-G	•	—
GTR30-S	—	•
GTR30-GS	•	•
<b>4G Router Models</b>		
GTR40	—	—
GTR40-G	•	—
GTR40-S	—	•
GTR40-GS	•	•



## SPECIFICATIONS

	GTR 30	GTR40
<b>NETWORK PARAMETERS</b>		
Frequency Range	HSPA 900/2100	LTE B1/B3/B7/B8/B20 UMTS/HSPA+ B1/B5/B8
Rate (DL/UL)	HSPA: 7.2 Mbps/5.76 Mbps	4G LTE: 100 Mbps*/50 Mbps
	WCDMA: up to 384 kbps	
	EDGE class 12: up to 237 kbps	
	GPRS class 12: up to 85.6 kbps	
<b>CPU PARAMETERS</b>		
CPU	NXP i.MX287 454 MHz	
RAM Memory	128 Mb	
Flash memory	256 Mb	
<b>POWER</b>		
Source	DC 10 ~ 50 V	
Consumption	8 W	
Current	400 mA (24V)	
Connector	MicroFit 4-pin	
<b>MECHANICAL &amp; ENVIRONMENTAL</b>		
Dimensions	97 x 78 x 36 mm (L x W x H)	
Weight	180 gr	
Enclosure	Aluminum alloy (IP30)	
Mounting	DIN rail, wall, table rubber feet	
Operating temperature	-40...+70° C	
Warranty	2 years	
Relative Humidity	up to 90% at 20° C temperature	
Average Service Life	10 years	
Certifications	CE, RoHS	

\* no more than 30 Mbps under real conditions

GTR30/GTR40	
<b>INTERFACES AND CONNECTORS</b>	
Ethernet	2 x RJ-45 10/100 Mbps
USB	1 x USB2.0 A type (Host/Device)
SIM	2 x mini-SIM
RS-232	1 x DB9-M Rate: 1200-15200bps. 8N1
RS-485	1 x 2-pin terminal block. Rate: 1200-115200bps. Termination resistor: connected 120 Ohm
IO lines	x4 Operating modes: voltage measurement, resistive sensors connection, load control. Max. voltage: 50V (max. measurable voltage: 18V). Max. current (per channel): 60mA
SD card	1 x microSD
Antenna 3G/4G	
<b>SOFTWARE AND NETWORKING</b>	
Operating System	OpenWrt (Linux-based)
Network Services	GRE, IPIP, OpenVPN, L2TP, PPTP, PPPoE etc, NAT, MPLS, DHCP (server/client)
Management	<ul style="list-style-type: none"> <li>LuCI web interface</li> <li>command line (SSH)</li> </ul>
Protocol Conversion	Modbus RTU/ASCII ↔ Modbus TCP
Reliability	<ul style="list-style-type: none"> <li>dual SIM card slots,</li> <li>hardware watchdog timer,</li> <li>Multi-WAN</li> </ul>
Security	IPSec/VPN, Firewall IPRoute, IP/MAC filtering
<b>OPTIONAL</b>	
<ul style="list-style-type: none"> <li>G - GPS module with high accuracy time synchronization unit. 1 x SMA(f) connector for GPS antenna</li> <li>S - Supercapacitor to provide router backup power supply</li> </ul>	

