# 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

Н	igh-Accuracy GPS Module	Supercapacitor		
3G Router Models				
GTR30	_	_		
GTR30-G	•	_		
GTR30-S	_	•		
GTR30-GS	•	•		
4G Router Models				
GTR40	_	_		
GTR40-G	•	_		
GTR40-S	_	•		
GTR40-GS	•	•		



### **SPECIFICATIONS**

	GTR 30	GTR40		
NETWORK PARAMETERS				
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			
Rate (DL/OL)	EDGE class 12: up to 237 kbps			
	GPRS class 12: up to 85.6 kbps			
CPU PARAMETE	RS			
CPU	NXP i.MX287 454 MHz			
RAM Memory	128 Mb			
Flash memory	256 Mb			
POWER				
Source	DC 10 ~ 50 V			
Consumption	8 W			
Current	400 mA (24V)			
Connector	MicroFit 4-pin			
MECHANICAL &	ENVIRONMENTAL			
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 (-20+55° C - for routers with supercapacitor)			
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
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	GTR30/GTR40			
INTERFACES AND CONNECTORS				
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				
SOFTWARE AND NETWORKING				
Operating System	OpenWrt (Linux-based)			
Network Services	GRE, IPIP, OpenVPN, L2TP, PPTP, PPPoE etc, NAT, MPLS, DHCP (server/client)			
Management	<ul><li>LuCl web interface</li><li>command line (SSH)</li></ul>			
Protocol Conversion	Modbus RTU/ASCII ↔ Modbus TCP			
Reliability	<ul><li>dual SIM card slots,</li><li>hardware watchdog timer,</li><li>Multi-WAN</li></ul>			
Security	IPSec/VPN, Firewall IPRoute, IP/MAC filtering			
OPTIONAL				
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- **G** GPS module with high accuracy time synchronization unit. 1 x SMA(f) connector for GPS antenna
- **S** Supercapacitor to provide router backup power supply