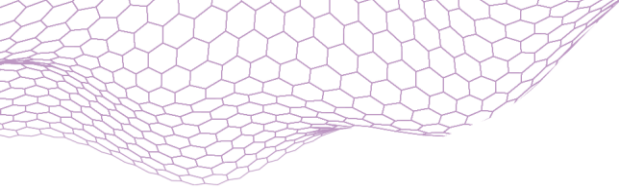


5G INDUSTRIAL DUAL SIM CELLULAR GATEWAY

MODEL DDCG NU310R 5G-F





SYNOPSIS

- DDCG NU310R 5G-F IS A WIRELESS ROUTER FOR THE INTERNET OF THINGS, WHICH USES PUBLIC 3G/4G/5G NETWORKS TO PROVIDE USERS WITH WIRELESS LONG-DISTANCE BIG DATA TRANSMISSION FUNCTIONS.
- IT USES INDUSTRIAL 32-BITS CPU AND EMBEDDED REAL TIME OPERATING SYSTEM
- PROVIDE 1 * RS232, 1 * RS485, 1 * LAN AND 1 * WAN/LAN, WIFI PORTS THAT CAN CONVENIENTLY AND TRANSPARENTLY CONNECT YOUR EXISTING SERIAL AND ETHERNET DEVICES TO A CELLULAR NETWORK
- IT HAS BEEN WIDELY USED ON M2M FIELDS, SUCH AS SELF-SERVICE TERMINAL, INTELLIGENT TRANSPORTATION, SMART GRID, INDUSTRIAL AUTOMATION, TELEMETRY, FINANCE, POS, WATER SUPPLY, ENVIRONMENT PROTECTION, WEATHER, AND SO ON.

FEATURES

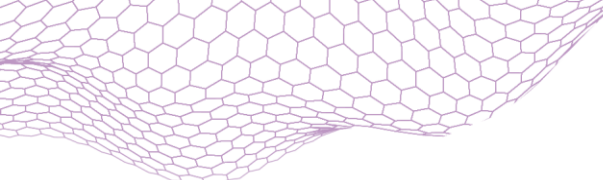
- DESIGNED FOR INDUSTRIAL APPLICATION
- HIGH-POWERED INDUSTRIAL CELLULAR MODULE
- HIGH-POWERED INDUSTRIAL 32BITS CPU
- SUPPORT LOW-CONSUMPTION MODE, INCLUDING SLEEP MODE, SCHEDULED ONLINE/OFFLINE MODE, SCHEDULED POWER-ON/POWER-OFF MODE (OPTIONAL)
- METAL HOUSING
- IP30 INGRESS PROTECTION
- WIDE POWER RANGE, DC 9 TO 36V

RELIABILITY

- SUPPORT HARDWARE AND SOFTWARE WDT
- SUPPORT AUTO RECOVERY MECHANISM, INCLUDING ONLINE DETECT, AUTO REDIAL WHEN OFFLINE TO MAKE GATEWAY ALWAYS ONLINE
- ETHERNET PORT : 1.5KV MAGNETIC ISOLATION PROTECTION
- RS232/RS485 PORT : 15KV ESD PROTECTION
- SIM/UM PORT : 15KV ESD PROTECTION
- POWER PORT : REVERSE-VOLTAGE AND OVERVOLTAGE PROTECTION
- ANTENNA PORT : LIGHTENING PROTECTION (OPTIONAL)

STANDARD AND CONVENIENCE

- SUPPORT DUAL SIM, ACTIVE / PASSIVE MODE
- SUPPORT 1 * RS232, 1 * RS485, ETHERNET & WIFI PORT THAT CAN CONNECT TO SERIAL, ETHERNET & WIFI DEVICES DIRECTLY
- SUPPORT STANDARD WAN PORT & PPPOE PROTOCOL THAT CAN CONNECT TO ADSL DIRECTLY
- ENTER INTO COMMUNICATION STATE AUTOMATICALLY WHEN POWERED
- PROVIDE MANAGEMENT SOFTWARE FOR REMOTE MANAGEMENT
- SUPPORT SEVERAL WORK MODES
- CONVENIENT CONFIGURATION AND MAINTENANCE INTERFACE WEB OR CLI



HIGH PERFORMANCE

- SUPPORT DUAL SIM SWITCHING FUNCTION
- SUPPORT 2G/3G/4G/5G STATIC IP/DHCP/L2TP, PPTP, PPOE WAN ACCESS METHODS
- SUPPORT DOUBLE LINK BACKUP BETWEEN LTE / WCDMA AND WAN (PPPOE, ADSL) (OPTIONAL)
- Support Private APN SIM card
- SUPPORT VPN CLIENT & SERVER (PPTP, L2TP, OPENVPN, IPSEC)
- SUPPORT LOCAL AND REMOTE FIRMWARE UPGRADE, IMPORT AND EXPORT CONFIGURE FILE.
- SUPPORT NTP, RTC EMBEDDED
- SUPPORT MULTIPLE DDNS PROVIDERS
- SUPPORT MAC ADDRESS CLONE, PPPOE SERVER
- SUPPORT APN/VPDN
- SUPPORT IP APPLICATION SUCH AS PING, DHCP SERVER AND CLIENT, FIREWALL, UPNP, ALG, SNAT & DNAT, DMZ HOST, URL BLOCK, QOS, TRAFFIC STATISTICS, REAL TIME LINK SPEED STATISTICS ETC
- FULL PROTOCOL SUPPORT, TCP/IP, UDP, ICMP, SMTP, HTTP, HTTPS, POP3, OICQ, TELNET, FTP, SNMP, SSHD, ETC. SUPPORT MODBUS RTU TO MODBUS TCP CONVERSION.
- SUPPORT WIFI 802.11 B/G/N, AP, CLIENT, REPEATER BRIDGE MODE
- WIFI SUPPORT WEP, WPA, 4 SSID, WPA2, WPA PSK, WPA2 PSK AND MAC ADDRESS FILTER
- SUPPORT LINK DISCONNECTION WHEN TIMEOUT
- SCHEDULE REBOOT, SCHEDULE ONLINE AND OFFLINE, ETC.
- SUPPORT SYSTEM LOG (WEB, CONSOLE, NET)
- MONITORING OF VPN, WAN, WI-FI, LAN, BANDWIDTH, DAILY DATA USED IN WEB.
- Support VLAN, MAC address clone and PPPoE server
- SUPPORT PORT BRIDGING.
- SUPPORT PACKET FILTER.

CELLULAR SPECIFICATIONS

STANDARD & BAND

- 5G NR: n1/n2/n3/n5/n7/n8/n20/n28/n41/n66/n71/n77/n78/n79
- FDD-LTE B1 to B8 and B28
- FDD LTE 2600/2100/1800/900/800MHz, 700/1700/2100MHz (optional)
- TDD-LTE B38/B39/B40/B41
- TDD LTE 2300/2500/2600 MHz
- TD-SCDMA: B34, B39
- HSPA+/UMTS B1/B2/B5/B8
- WCDMA/HSPA+: Band 1, 8, TD-SCDMA: Band 34, 39
- EV-DO: BC0
- CDMA 1x: BC0
- EDGE/GPRS/GSM 850/900/1800/1900MHz
- GPRS Terminal Device Class: Class B
- GPRS Coding Schemes CS1 to CS4

BANDWIDTH

- 5G NR : 3.4 Gbps (DL), 350 Mbps (UL)
- LTE Cat20 : 2.0 Gbps (DL), 150 Mbps (UL)
- HSPA+ : 42 Mbps (DL) 5.76 Mbps (UL)
- TX power : <23 dBm
- RX sensitivity : -97dBm
- Antennae gain : 3dB. Higher gains possible.

WIFI SPECIFICATION

- IEEE802.11 b/g/n, 2.4G, Support AP Mode, IEEE802.11ac, 5.8G, Support AP Mode
- 54Mbps for 11b/g & 300 Mbps for 11n, 866 Mbps for 11ac
- WEP, WPA, WPA2, WPS (Optional)
- Tx Power : 15 +/- 2dbm
- Sensitivity : 26dBm (11b), 21dBm (11ac/MCS7/HT40), 20dBm (11ac/MCS9/HT80)
- Antennae gain : 5dB

HARDWARE SYSTEM

CPU	Industrial 32bits CPU
FLASH	32MB
DDR2	512MB
INTERFACE TYPE	
Ethernet	1 * 10/100/1000 Mbps LAN / WAN port 1 * 10/100/1000 Mbps Ethernet Ports, Auto MDI/X, 1.5KV magnetic isolation protection
Serial	1 * RS 232, 1 * RS 485port 15KV ESD protection Data bits 5, 6, 7, 8 Stop bits 1, 1.5 (optional), 2 Parity None, Even, Odd, (space, mark) (optional) Baud rate 2400 to 115200 bps
LED Indicator	Wi-Fi, Online, Power, SYS
Antenna	4 * Cellular & 2 * Wi-Fi, characteristic impedance 50 ohm
SIM/UIM	Standard drawer type user card interface 3V/1.8V user card interface, 15KV ESD protection Support dual SIM card and eSIM
Power	Standard Terminal power socket, Reverse and Overvoltage protection
Reset	Restore the Gateway to its original factory default settings through Push button & GUI

POWER SUPPLY

Standard Power	DC 12V/1.5A,
Power range	DC 9 to 36V

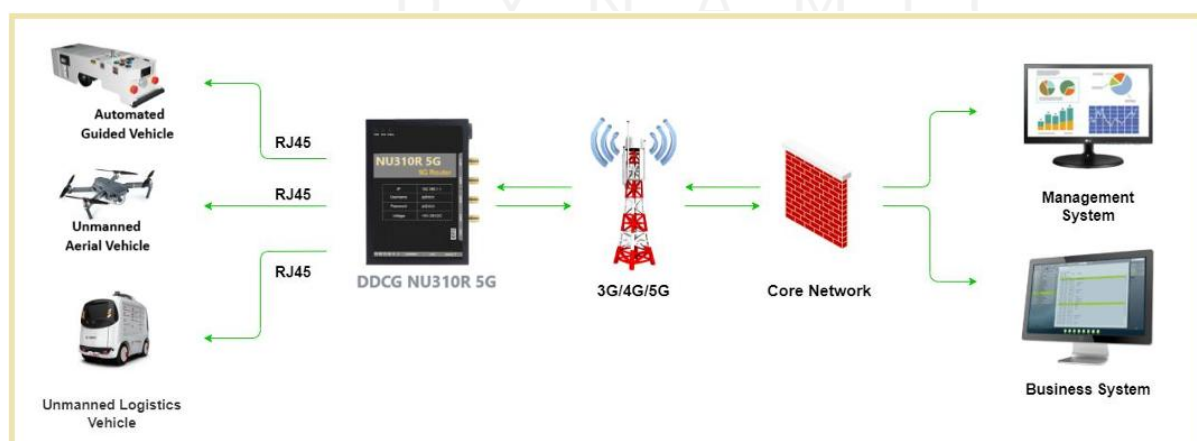
POWER CONSUMPTION

Standby	280 to 330 mA@12VDC
Working	325 to 562 mA@12VDC
Timing shutdown	2.57 to 4.2 mA@12DVC

OTHER SPECIFICATIONS

Physical Characteristics	Housing	Metal. IP30 protection
	Dimensions	106 x 76 x 23.5 mm
	Weight	285g
Environmental Limits	Operating Temperature	-35 to +75°C
	Storage Temperature	-40 to +85°C
	Operating Humidity	95% non-condensing
	MTBF	500,000 hours

TOPOLOGY



DIMENSION (MM)



ORDERING CODE

DDCG NU310R 5G-F

DDCG NU310R 5G	5G Cellular Gateway – Dual Sim
	1 * 485 Port & 1 * 232 Port
F	Fixed