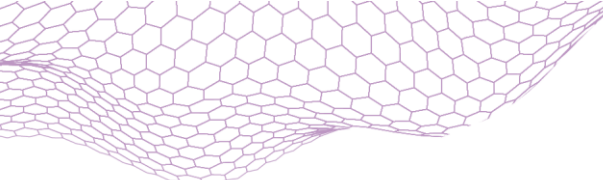




5G INDUSTRIAL GIGABIT CELLULAR ROUTER WITH POE PORTS

DDCG SERIES





SYNOPSIS

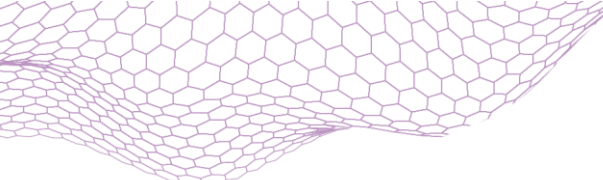
- THE DDCG 0719 5F A IS A HIGH-PERFORMANCE INDUSTRIAL IOT CELLULAR ROUTER DESIGNED TO SUPPORT MULTI-NETWORK CONNECTIVITY INCLUDING 5G, 4G, 3G, AND 2G, ALONG WITH WI-FI AND VPN TECHNOLOGIES.
- THE DEVICE IS BUILT ON A ROBUST 32-BIT INDUSTRIAL-GRADE PROCESSOR AND OPERATES ON AN EMBEDDED OPERATING SYSTEM TO ENSURE RELIABLE AND STABLE PERFORMANCE IN DEMANDING ENVIRONMENTS
- THE ROUTER PROVIDES EXTENSIVE INTERFACE SUPPORT, INCLUDING:
 - 1 × GIGABIT ETHERNET WAN PORT
 - 4 × GIGABIT ETHERNET LAN PORTS (OPTIONAL 2 × POE SUPPORT. 30W PER PORT, TOTAL POE BUDGET 60W)
 - 2 × RS232 SERIAL PORTS
 - 1 × RS485 PORT (OPTIONAL 2 × RS485)
 - 1 × MICRO SD CARD SLOT
 - 2 × DIGITAL INPUTS (DI)
 - 2 × DIGITAL OUTPUTS (DO)
 - DUAL-BAND 2.4 GHZ / 5.8 GHZ WI-FI INTERFACE
 - THIS COMPREHENSIVE INTERFACE CONFIGURATION ENABLES SEAMLESS AND FLEXIBLE CONNECTIVITY BETWEEN FIELD DEVICES AND CELLULAR NETWORKS.
 - THE DDCG 0719 5F A IS WIDELY DEPLOYED IN (M2M) AND INDUSTRIAL IOT APPLICATIONS, INCLUDING INTELLIGENT TRANSPORTATION SYSTEMS, SMART GRID INFRASTRUCTURE, INDUSTRIAL AUTOMATION, TELEMETRY, FINANCIAL SERVICES, POS SYSTEMS, WATER SUPPLY MANAGEMENT, ENVIRONMENTAL MONITORING, METEOROLOGICAL SYSTEMS, AND OTHER MISSION-CRITICAL INDUSTRIAL APPLICATIONS.

BASIC FEATURES

- INDUSTRIAL-GRADE HIGH-PERFORMANCE CELLULAR MODULE
- INTELLIGENT AUTO-RECOVERY WITH ONLINE DETECTION AND AUTOMATIC REDIAL
- HARDWARE AND SOFTWARE WATCHDOG TIMER (WDT)
- WI-FI SUPPORT: IEEE 802.11 B/G/N/AC (AP & CLIENT MODES), OPTIONAL 802.11AX
- 2 × DI AND 2 × DO INTERFACES
- REVERSE POLARITY AND OVER-VOLTAGE PROTECTION
- WIDE INPUT VOLTAGE RANGE: DC 9–36V
- OPERATING TEMPERATURE: –40°C TO +75°C
- LOCAL LOG STORAGE SUPPORTED
- OPTIONAL GPS POSITIONING

COMMUNICATION & CONVENIENCE

- SUPPORT STANDARD RS232(OR RS485/RS422), ETHERNET AND WIFI PORT THAT CAN CONNECT TO SERIAL, ETHERNET AND WIFI DEVICES DIRECTLY
- SUPPORT STANDARD WAN PORT AND PPPOE PROTOCOL THAT CAN CONNECT TO ADSL DIRECTLY
- SUPPORT INTELLECTUAL MODE, ENTER INTO COMMUNICATION STATE AUTOMATICALLY WHEN POWERED
- SUPPORT SEVERAL WORK MODES



PERFORMANCE RICH FEATURES

- CONVENIENT CONFIGURATION AND MAINTENANCE INTERFACE (WEB OR CLI)
- HIGH-PERFORMANCE AND SECURITY
- SUPPORT MULTIPLE WAN ACCESS METHODS, INCLUDING STATIC IP, DHCP, PPPOE, 2.5G/3G/4G/5G.
- SUPPORT DOUBLE LINK BACKUP BETWEEN 2.5G/3G/4G/5G AND WAN (OPTIONAL).
- SUPPORT VPN (PPTP, L2TP, IPSEC, OPENVPN AND GRE (TAP))
- SUPPORT REMOTE MANAGEMENT, SYSLOG, SNMP, TELNET, SSH, HTTPS, ETC.
- SUPPORT LOCAL AND REMOTE FIRMWARE UPGRADE, IMPORT AND EXPORT CONFIGURE FILE.
- SUPPORT NTP, RTC EMBEDDED.
- SUPPORT MULTIPLE DDNS PROVIDER SERVICE.
- SUPPORT MAC ADDRESS CLONING.
- WIFI SUPPORT 802.11B/G/N/AC. SUPPORT AP, CLIENT.
- WIFI SUPPORT 802.11AX (OPTIONAL)
- WIFI SUPPORT WEP, WPA, WPA2 ENCRYPTION.
- SUPPORT MULTIPLE ONLINE TRIGGER WAYS, INCLUDING SMS, RING AND DATA.
- SUPPORT LINK DISCONNECTION WHEN TIMEOUT.
- SUPPORT APN/VPDN.
- SUPPORT VRRP LINK BACKUP
- SUPPORT MULTIPLE DHCP SERVER AND DHCP CLIENT, DHCP BINDING MAC ADDRESS, DDNS, FIREWALL, NAT, DMZ HOST, QOS, TRAFFIC STATISTICS, REAL-TIME DISPLAY DATA TRANSFER RATE ETC.
- SUPPORT IOT PROTOCOL MQTT CLIENT AND SERVER (SUPPORT CA)
- SUPPORT INDUSTRIAL CONTROL OPCUA PROTOCOL AND MODBUS PROTOCOL CONVERSION
- SUPPORT PYTHON SECONDARY DEVELOPMENT PLATFORM (PYTHON3)
- SUPPORT TCP/IP, UDP, FTP(OPTIONAL), HTTP, ETC.
- SUPPORTS SPI FIREWALL, VPN PASS-THROUGH, ACCESS CONTROL, URL FILTERING
- SUPPORT LOCAL LOG STORAGE.
- SUPPORT GPS(OPTIONAL).
- SUPPORT DUAL4G/5GMODULE(OPTIONAL)
- SUPPORT POE(OPTIONAL). 30W PER PORT, TOTAL POE BUDGET 60W.
- SUPPORT SFP(OPTIONAL)
- SUPPORT ONLINE NETWORK TESTING
- SUPPORT RAIN FALL DATA COLLECTION (ENHANCED MODEL)
- SUPPORT CANBUS COMMUNICATION (ENHANCED MODEL)
- SUPPORT ANALOG DATA COLLECTION (ENHANCED MODEL)
- SUPPORT DIGITAL DATA COLLECTION (ENHANCED MODEL)
- SUPPORT THE PHOTO CAPTURE FUNCTION
- SUPPORT NB-IOT, LORA, ULTRA SHORTWAVE COMMUNICATION
- THE MODULAR ARCHITECTURE OF HARDWARE AND SOFTWARE
- SUPPORT CUSTOMIZATION OF I/O INTERFACES BOARD

TECHNICAL SPECIFICATIONS

INTERFACE

WAN	1* Gigabit Ethernet Ports (RJ45)
LAN	4* Gigabit Ethernet Ports (RJ45, optional 2 PoE.30W per port, Total PoE budget 60w)
Serial Ports	2 * Serial ports Serial Port 1: RS232*1 and RS485*1 cannot be used at the same time Serial Port 2: RS232*2, customizable to RS485*2 Micro SD card: Standard self-propelled Micro SD card interface (Max 128GB)
Antenna	Standard SMA Female interface, 50 ohm
SIM/UIM	Standard 3V/1.8V user card interface, 15KV ESD protection
Reset Button	DI: 2×Optical isolation digital input ports DO: 2×Optical isolation digital output ports
LED Indicator	PWR, RUN, NET, SIM1, SIM2, SIG, LAN1, LAN2, LAN3, LAN4, WAN

PROTOCOL CONVERSION SUPPORTED

Input	Modbus RTU/ TCP/Over TCP SiemensS7-S200/S200Smart/S300/S400/S1200/S1500(Optional) DLT645(Optional) DNP3.0Master (Optional)
Output	MQTT(JSON)/Mobile cloud/ Alibaba Cloud/ Telecom cloud Modbus RTU /TCP OPCUA IEC101 IEC104

WIFI AND BANDWIDTH STANDARD

Standard	IEEE802.11b/g/n, 2.4G support AP and Station mode IEEE802.11ac,5.8G support AP and Station mode IEEE802.11ax,2.4G & 5.8G (optional)
Bandwidth	IEEE802.11b/g:54Mbps (max) IEEE802.11n:300Mbps (max) IEEE802.11ac:866Mbps (max) IEEE802.11ax:1201Mbps (max) Security WEP, WPA, WPA2,etc.WPS (optional)

SUPPORTED FREQUENCY BAND

5G NR SA/NSA	n1/2/3/5/7/8/12/20/28/41/66/71/77/78/79
TDD-LTE	B38/39/40/41
FDD-LTE	B1/2/3/4/5/7/8/13/17/20/25/28
WCDMA	850/900/1900/2100MHz
TD-SCDMA	1880-1920/2010-2025MHz(A/F)
CDMA2000 1x/ EVDO Rev. A	800/1900MHz
GSM/GPRS/EDGE	850/900/1800/1900MHz
CDMA	800/1900MHz

BANDWIDTH

5G SA	Sub-6 2 Gbps (DL)/ 1 Gbps (UL)
5G NSA	Sub-6 2.2 Gbps (DL)/ 575 Mbps (UL)
LTE	600 Mbps (DL)/ 150 Mbps (UL)
UMTS	42.2 Mbps (DL)/ 11 Mbps (UL)

HARDWARE

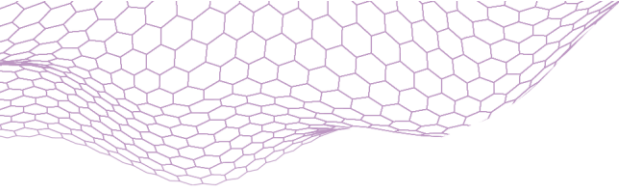
CPU	System Industrial 32-bit CPU
FLASH	16MB (Extendable to 64MB)
SDRAM	512MB

POWER

Power supply range	DC9 to 36V (12VDC recommended)
Current	<900mA @12V DC (5G Module)
Max current	<1200mA @12V DC (5G Module)

MECHANICAL

Dimensions	128x114.5x46mm
Weight	700g
Installation	Wall mounting, Desktop



ENVIRONMENTAL

Operating Temperature	-40 to +75°C
Storage Temperature	-40 to +85°C
Relative Humidity	95% (non-condensing)

ORDERING CODE

DDCG 0719 5F P A

DDCG 0719 5F	Databridge Dynamic 5G Industrial IoT Cellular Router with 1×Gigabit Ethernet WAN, 4×Gigabit Ethernet LAN ports, 2.4G/5.8G Wi-Fi interface, 2×DI, 2×DO
P	Optional 2* PoE Ports 30W per port, Total poe budget 60W
A	Fixed



DATA BRIDGE
D Y N A M I C