



UF51 5G CPE



APPLICATIONS

- SMART OFFICES
- VIDEO SURVEILLANCE
- INDUSTRIAL AUTOMATION
- TRAFFIC APPLICATIONS
- ROBOTS
- DIGITAL MEDIA IMPLEMENTATIONS

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FEATURES

QUALCOMM QUAD-CORE CPU

with big memory, providing high performance for data transmission

2.4G & 5G DUAL BAND

Wi-Fi support

EMBEDDED PYTHON SDK

for functional programming and seamless deployment to edge nodes

RELIABLE FIREWALL FOR SECURE NETWORKING

SPI, ACL, port mapping, IP/MAC binding, etc.

- WIDE OPERATING TEMPERATURE
range from -40°C to 70°C and industrial design for harsh environment
- OUTDOOR APPLICATIONS
IP67 waterproof and UV-protective enclosure
- WEB GUI AND CLI
simple management and quick configuration among a large quantity of devices
- DEVICEHUB
provides remote monitoring, bulk configuration, and centralized management



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SPECIFICATIONS

Hardware System

CPU	Qualcomm Quad-core ARM Cortex-A7, 716.8 MHz
Memory	512 MB DDR3 RAM and 8 GB Flash

Cellular Interface

Network	5G/4G LTE
Antenna	8 × Internal Antennas
SIM Slot	1 (Mini SIM-2FF)

Ethernet Interface

Numbers	2 × 10/100/1000 Mbps
Property	1 × WAN + 1 × LAN or 2 × LAN
Mode	Full or Half Duplex (Auto-Sensing)
PoE	1 × 802.3af PoE PD on WAN/LAN1 Port

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Wi-Fi Interface

Antenna	4 × Internal Antennas
Standards	IEEE 802.11b/g/n, 2.4 GHz IEEE 802.11a/n/ac, 5 GHz
Tx Power	2.4 GHz: 26dBm (max) 5 GHz: 26.4dBm (max)
Rx Sensitivity	
2.4 GHz	802.11b: ≤ -92dBm@11Mbps 802.11g: ≤ -78dBm@54Mbps 802.11ac VHT20: ≤ -91dBm@MCS0 802.11ac VHT20: ≤ -66dBm@MCS8 802.11ac VHT40: ≤ -88.5dBm@MCS0 802.11ac VHT40: ≤ -64dBm@MCS8
5 GHz	802.11a: ≤ -91dBm@6Mbps 802.11a: ≤ -76dBm@54Mbps 802.11ac VHT20: ≤ -90dBm@MCS0 802.11ac VHT20: ≤ -68dBm@MCS8



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	802.11ac VHT40: $\leq -87\text{dBm@MCS0}$ 802.11ac VHT40: $\leq -65\text{dBm@MCS9}$ 802.11ac VHT80: $\leq -84\text{dBm@MCS0}$ 802.11ac VHT80: $\leq -60\text{dBm@MCS9}$
Modes	AP and Client Mode
Security	WPA/WPA2 authentication, WEP/TKIP/AES encryption

GNSS

Antenna	1 × Internal Antenna
Technology	GPS/GLONASS/Beidou/Galileo/QZSS

Serial Interface

Numbers	1 × RS232 or 1 × RS485 (Switchable)
Connector	3.5 mm Terminal Block
Baud Rate	300bps to 230400bps

DI/DO

Numbers	1 × DI (Dry Contact) + 1 × DO (Wet Contact), Galvanic Isolation
Connector	3.5 mm Terminal Block
Maximum V/A	0.3A@30VDC (DO)

Others

Reset Button	1 × RESET
LED Indicators	1 × STATUS, 1 × Cellular Network
Built-in	Watchdog, Timer

Software

Network Protocols	IPv4/IPv6, PPP, PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, RIPv1/v2, OSPF, DDNS, VRRP, HTTP, HTTPS, DNS, ARP, QOS, SNTP, Telnet, VLAN, SSH, etc
VPN	DMVPN, IPsec, OpenVPN, PPTP, L2TP, GRE
Security	Access Control, DMZ, Port Mapping, MAC Binding, SPI Firewalls, DoS&DDoS Protection, Filtering(IP&Domain), IP Passthrough
Management	Web, CLI, SMS, On-demand dial up, SNMP v1/v2/v3, DeviceHub
AAA	Radius, Tacacs+, LDAP, Local Authentication



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Multilevel Authority	Multiple Levels of User Authority
Reliability	VRRP, WAN Failover
Serial Port	Transparent (TCP Client/Server, UDP), Modbus Master/Slave, ModbusGateway (Modbus RTU to Modbus TCP)

Power Supply and Consumption

Power Input	1. 9-48 VDC, with Surge-Protection and Reverse Polarity Protection 2. 802.3af PoE PD
Power Connector	2-pin 3.5 mm Terminal Block
Power Consumption	≤ 7 W

Physical Characteristics

Ingress Protection	IP67
Housing	Polycarbonate + Metal
Dimension	No Waterproof Connector: $\phi 105 \times 110 \times 187$ mm ($\phi 4.13 \times 4.33 \times 7.36$ in) With Waterproof Connector: $\phi 105 \times 110 \times 218$ mm ($\phi 4.13 \times 4.33 \times 8.58$ in)
Installation	Desktop, Pole Mounting, Wall Mounting, Bottom Magnet/ScrewMounting

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Environmental

Operating Temperature	40°C to +70°C (-40°F to +158°F) Reduced Cellular Performance Above 60°C
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Ethernet Isolation	1.5 kV RMS
Relative Humidity	0% to 95% (Non-condensing) at 25°C/77°F

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