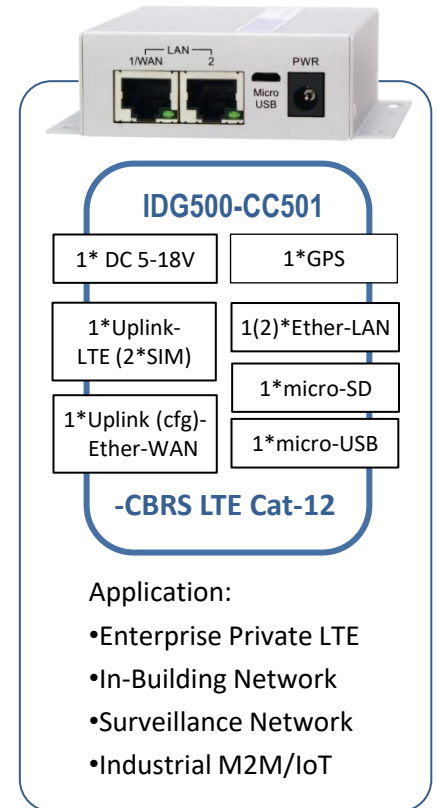# IDG500-CC501
4G CBRS WAN Extender

Functions:

- Plug & Play, providing capability for existed Ethernet-based equipments to connect on CBRS OnGo network without any efforts.

- Expanding LTE-based WAN connection for various IP networks at instant, including enterprise, industrial IoT, manufacturing, and in-building networks.

- To be primarily or backup WAN for IP network connection. It can expand fail-over for network at single WAN between LTE and Ether-WAN. Dual SIMs allow to do connectivity fail-over between different networks or MNOs.

- Compact and easy to be integrated into solution. Equips high-speed Cat-12 LTE-A and two Gigabit Ethernet LAN. GPS enables location tracking. Micro-SD used for local storage. Micro-USB for future expansion.

- Support different VPN technologies which can build a VPN tunnel with remote site to provide a secure connection for data transmission.

- Both IPv4/IPv6 protocol stack meet ISP requirement. Gateway base on IP pass through or DHCP based NAT with Port Forwarding. Rich Routing function covers static, dynamic and OSPF compatible with most IP network.

- Web-UI for basic setting. CLI and Command Script for advance setting. TR-069 used with AMIT-NMS for multi-site management. SNMP used for popular network tools management. SDK used for application expansion development.

IDG500-CC501

1* DC 5-18V	1*GPS
1*Uplink-LTE (2*SIM)	1(2)*Ether-LAN
1*Uplink (cfg)-Ether-WAN	1*micro-SD
	1*micro-USB

-CBRS LTE Cat-12

Application:
- Enterprise Private LTE
- In-Building Network
- Surveillance Network
- Industrial M2M/IoT

Application Description:

1. Build a private LTE network prevents paying monthly fee to mobile operators.
2. Independent and close network make it securer for transmitting sensitive data.
3. Work at 3.5GHz CBRS spectrum with less interference and no additional cost.
4. AMIT CBRS Routers transform a Ethernet-based device into a CBRS device.
5. Plug & Play, no need to change any configuration on existed Ethernet devices.

Specification Summary

Device Interface
- **LTE Module:** 1*Cat-12 LTE-TDD, 2*SIM
- **LTE Band:** Band 42/43/48(CBRS)
  - 2x CA (Downlink):
    - B42+B42
    - B48+B48
  - 2x CA (Uplink):
    - B42+B42
  - 3x CA (Downlink):
    - B42+B42+B42
    - B48+B48+B48
- **Ethernet:** 2*RJ45 Gigabit Ethernet
- **Log Storage**: 1*MicroSD, 1*MicroUSB
- **Power Input :** 1* DC 5V ~ 18V (DC Jack)
- **Antenna Con.:** 2*SMA (F)-LTE, 1* SMA(F)-GPS

WAN & Uplink
- **WAN:** CBRS LTE, Ether-WAN**;** Failover,
- **Cellular:** CBRS LTE, IP Pass-through, IPv4/v6
- **Ether-WAN:** Dynamic IP, Static IP, PPPoE , PPTP, L2TP
- **Network Monitor:** ICMP/DNS Query

Protocol
- **LAN & VLAN**: DHCP Server/Relay , Port/Tag based VLAN
- **IPv6*:** Dual Stack, Static IPv6, DHCPv6, PPPoEv6
- **Port Forward:** Virtual Server, Virtual Computer, DMZ, VPN Pass-through
- **Routing:** Static, Dynamic - RIP1/RIP2, OSPF, BGP

Security
- **VPN Tunneling:** IPSec, OpenVPN, PPTP, L2TP, GRE
- **Scenario:** Site/Host to Site/Host; Hub and Spoke; Dynamic VPN
- **VPN Capability**: Hardware crypto engine, IPSec: up to 3 tunnels
- **Firewall:** SPI Firewall with Stealth Mode, IPS
- **Access Control:** Packet Filter, URL Blocking, MAC Filter

Object
- **Scheduling**: Time Schedule List
- **Grouping**: Host Grouping List
- **Ext. Server**: Email, Syslog, RADIUS, SCEP, FTP, DDNS, IGMP
- **Certificate**: My Certificate, Trusted Certificate, Issue Certificate

Administration
- **Configuration & Mgmt. :** Web, Telnet & SSL, Command Script, SNMPv3 Std. & Proprietary MIB , TR069, Python*
- **System:** Upgrade, Backup & Restore, Reboot & Reset, SysLog
- *Diagnostic:* Packet Analyzer, Diagnostic Tools

Service
- **Cellular Toolkit:** Data Usage, SMS, SIM PIN, USSD, Network Scan
- **Event Handling:** User Defined Manage/Notify Event; SMS, Mail, Syslog, SNMP Trap
- **GNSS*:** GPS Location Tracking / Viewer

Environment
- **Operation Temperature:** -22°F-158°F (-30°C-70°C)
- **Storage Temperature:** -40°F-185°F (-40°C-85°C)
- **Humidity:** 10%~95% (non-condensing)
- **Enclosure:** Metal, Mounting Tab
- **Dimension:** 90(L)x93(W)x27(H)mm (exclude antenna connectors)
  - 90(L)x101(W)x27(H)mm (include antenna connectors)

Certification
- FCC Part 15B
- FCC Part 96 for CBRS
- CBRS OnGo capable

Package Accessory
- 1*IDG500-CC501
- 2*CBRS LTE Antenna
- 1*Power Adapter DC 5V/2A
- 1*DIN Rail Kit
- 4*Rubber feet
- 1*RJ45 Cable

Mechanic Drawing

Front View

Rear View

Note
- Specifications are subject to change without prior notice.