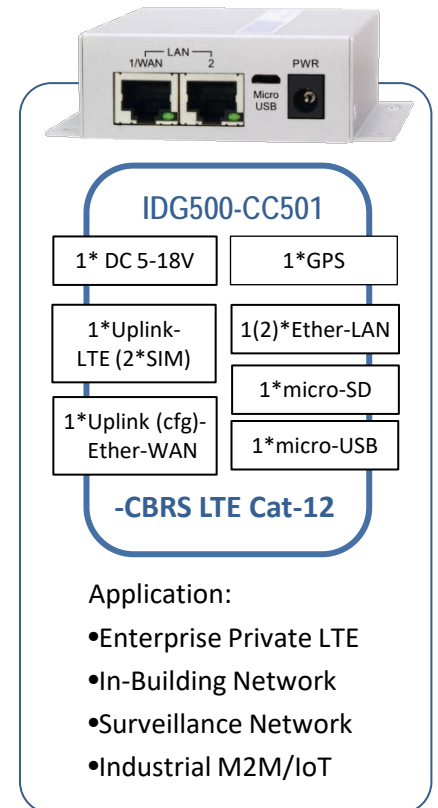# IDG500-CC501
4G CBRS WAN Extender

Functions:

- Plug & Play, providing capability for existing Ethernet-based equipment to connect effortlessly to a CBRS OnGo network.

- Instantly create LTE-based WAN connection options for various IP networks, including enterprise, industrial IoT, manufacturing, and in-building networks.

- Enable primary or backup WAN connection for IP networks. Expand network fail-over option at single WAN between LTE and Ether-WAN. Dual SIMs allow connectivity fail-over between different networks or MNOs.

- Compact and easy solution integration. Provides high-speed Cat-12 LTE-A and two Gigabit Ethernet LAN ports. GPS enabled location tracking. Micro-SD option for local storage. Micro-USB port for future expansion.

- Support for multiple VPN technologies enabling VPN tunnel with remote site providing a secure connection for data transmission.

- IPv4/IPv6 protocol stack meeting ISP requirements. Gateway based on IP pass through or DHCP based NAT with Port Forwarding. Rich routing function covers static, dynamic and OSPF options compatible with most IP networks.

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

IDG500-CC501

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

-CBRS LTE Cat-12

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

Application Description:

1. Building a private LTE network prevents paying monthly fee to mobile operators.
2. Independent and closed network make it more secure for transmitting sensitive data.
3. Operate 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 existing 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
    - B48+B48*
  - 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 & SSH, Command Script, SNMPv3 Std. & Proprietary MIB , TR069
- **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)
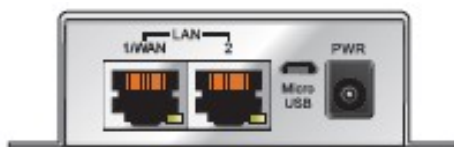 - 90(L)x101(W)x27(H)mm (include antenna connectors)

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

Mechanical Drawing

Front View

Rear View

Note
- B48+B48 CA for uplink is under development.
- Specifications are subject to change without prior notice.