

Secure & Reliable Connectivity  
with 5G



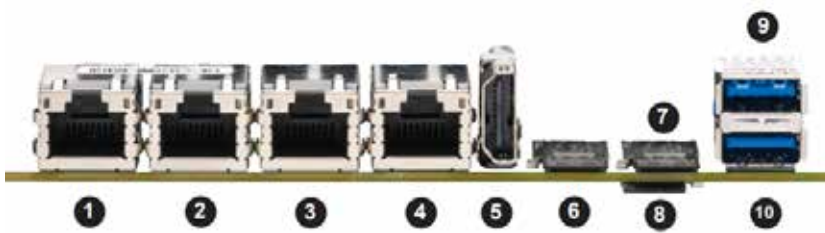
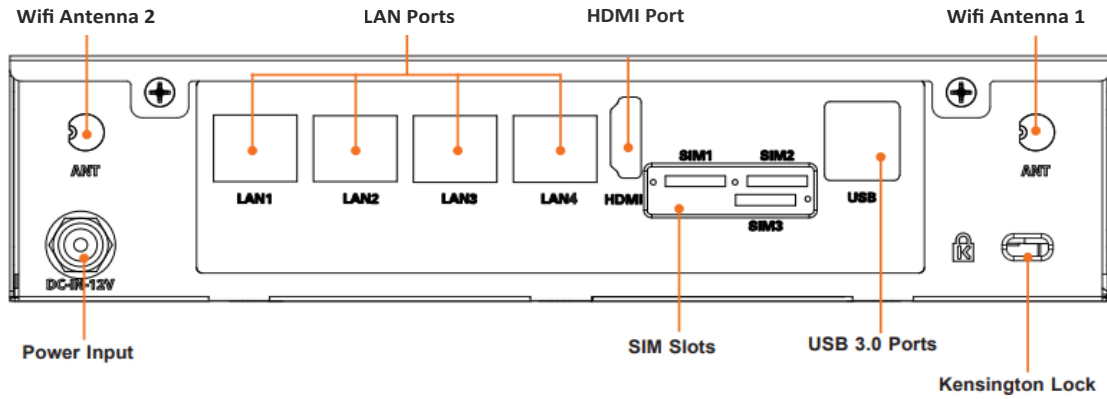
DATASHEET

COSGrid IoT gateway is a cutting-edge network router designed to facilitate **seamless connectivity and communication between IoT devices, its users and the cloud** . By **leveraging the power of 5G**, our gateway ensures ultra-fast and reliable data transfers, minimizing latency and maximizing throughput. Our COSGrid IoT gateway is **not only a hardware device but also encompasses powerful software programs** that enhance its functionality. It is designed to seamlessly integrate with existing IoT ecosystems, making it highly versatile and adaptable to various IoT deployments. With COSGrid, businesses and organizations can experience enhanced connectivity, improved data security, and streamlined device management. Our IoT gateway is the ultimate solution for harnessing the full potential of IoT devices and leveraging the power of the cloud for data-driven decision-making.



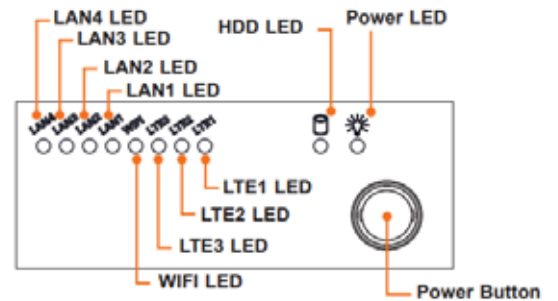
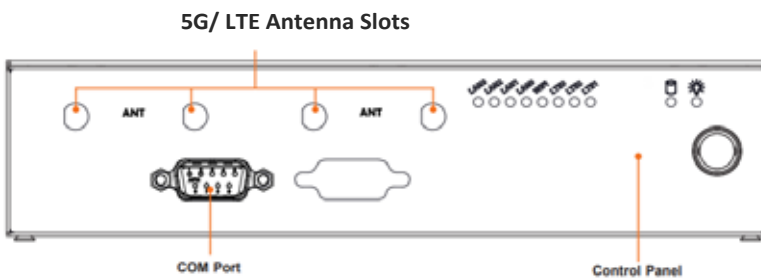
## COSGrid's IoT Gateway- IG4xG

## Rear View - IG4xG



Rear I/O Ports	
1 LAN1	6 SIM Slot 1 (JMD1)
2 LAN2	7 SIM Slot 2 (JMD2)
3 LAN3	8 SIM Slot 3 (JMD3)
4 LAN4	9 USB1
5 HDMI	10 USB0

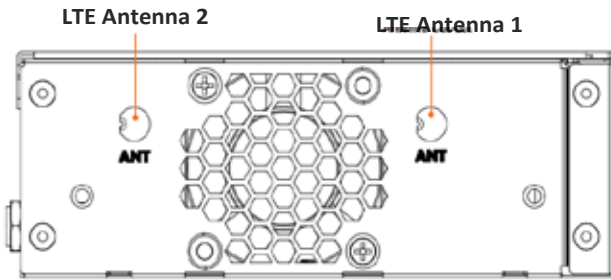
## Front View - IG4xG



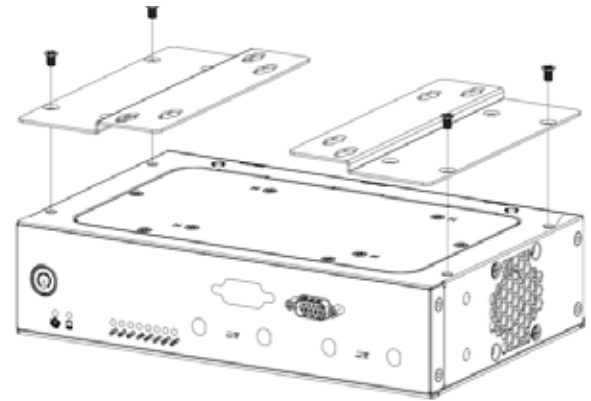
Control Panel	
Power Button	Applies or removes power from the power supply to the server; standby power is maintained
Power LED	Indicates power is being supplied to the system power supply; illuminated when the system is operating normally
HDD LED	Indicates hard drive activity when flashing
LTE1 LED	WAN connection
LTE2 LED	WAN connection
LTE3 LED	WAN connection
WIFI LED	Wireless Network connection
LAN1 LED	Indicates network activity on LAN port 1 when flashing
LAN2 LED	Indicates network activity on LAN port 2 when flashing
LAN3 LED	Indicates network activity on LAN port 3 when flashing
LAN4 LED	Indicates network activity on LAN port 4 when flashing

LED Status	
Status	Description
Continuous on and red	An overheat condition has occurred. (This may be caused by cable congestion.)
Blinking red (1Hz)	Fan failure, check for an inoperative fan.
Blinking red (0.25Hz)	Power failure, check for a non-operational power supply.
Solid blue	UID has been activated locally to locate the Box in a rack environment.
Blinking blue	UID has been activated using IPMI to locate the box in a rack environment

## Side View - IG4xG



## IG4xG -Mounting Brackets



## IG4xG Specifications

<b>Mobile</b>	
Cellular Bands	5G NR NSA: n41/n77/n78/n79   5G NR SA:n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48* /n66/ n71/n77/ n78/n79   LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71   LTE -TDD: B34/B38/B39/B40/B41/B42/B43/B48
Module	5G Sub-6Ghz SA 1/2 Gbps DL (4x4 MIMO) or higher , 900/600 Mbps UL (2x2);
Status	Signal strength (RSSI), SINR, RSRP, RSRQ, EC/IO, RSCP Bytes sent/received, connected band, IMSI, ICCID
APN	Auto APN
Multiple PDN	Possibility to use different PDNs for multiple network access and services
<b>Wifi Access points</b>	
Access Points	Supports 802.11b/g/n/ac
WiFi Security	WPA X /WEP/ TKIP variants as per the latest version.
User Connections	Support minimum 30 simultaneous WiFi users connections
Optional	Support LoRa, Sigfox any of the LPWAN
<b>Networks</b>	
Network protocols.	Supports all required Protocols: TCP, UDP, IPv4, IPv6, ICMP, NTP, DNS, HTTP, HTTPS, SFTP, FTP, SMTP, SSL/TLS, ARP, VRRP, PPP, PPPoE, UPNP, SSH, DHCP, SMPP, SMNP, MQTT, Wake On Lan (WOL)
Routing	Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2, EIGRP, NHRP), Policy based routing
Load Balancing	Balance the Network traffic over multiple WAN connections
IP Allocation	Supports static and dynamic IP allocation
<b>VPN</b>	
WireGuard	WireGuard VPN client and server support   Mesh VPN
IpSec	Supports up to 5 x VPN IPsec tunnels with different AES/DES encryption methods.
VPN	Site-to-Site, Route/Policy based VPN, IKEv2, DPD, PFS Confidentiality algorithms: Pre-shared and PKI Authentication with RSA certificates, hashing, Diffie Hellman key exchange, Hub and Spoke, OpenVPN
<b>Security</b>	
VLAN	Port and tag-based VLAN separation
Firewall	Pre-configured firewall rules can be enabled via the WebUI, unlimited firewall configuration via CLI; NAT; NAT-T
Attack prevention	DDOS Prevention   Port scan prevention
Web Filtering	Blacklist for blocking out unwanted websites, Whitelist for specifying allowed sites only
PKI & Secure Device enrollment	PKI, SCEP

Application Visibility & Control	Identifies more than 2000+ applications and protocols, Application group support, Application filter support, Application visibility and log support
Port Security	WPA-Enterprise (EAP-MD5, EAP-TLS), WPA-Personal - Wi-Fi & Routed Port
Authentication	Pre-shared key, digital certificates, X.509 certificates, TACACS+, Radius, IP & Login attempts block  Two-factor authentication and single sign-on with leading Identity Providers such as Okta, Azure AD etc
<b>Monitoring &amp; Management</b>	
Management	Status, configuration, FW update, CLI, troubleshoot, event log, system log   API Management over HTTP/HTTPS  Firmware update from server, automatic notification
Traffic Flow Analytics	Applications, per-endpoints, per-branch level usage analytics
WAN Monitoring	WAN Links and VPN tunnels health monitoring and real-time alerts
Remote troubleshooting	Real-time diagnostic and troubleshooting tools including packet capture
<b>IoT PLATFORMS</b>	
Clouds of things	Allows monitoring of: Device data, Mobile data, Network info, Availability
Cumulocity	Allows monitoring of: Device Model, Revision and Serial Number, WAN Type and IP, Mobile Cell ID, ICCID, IMEI, Connection Type, Operator, Signal Strength
ThingWorx	Allows monitoring of: WAN Type, WAN IP, Mobile Operator Name, Mobile Signal Strength, Mobile Network Type
<b>Hardware Device</b>	
Processor	Intel® Celeron® J3455 Processor, Quad Core, 2M Cache, 1.5GHz2.3GHz,
Memory	Integrated memory controller supports up to 8GB DDR3L 1866MHz Non-ECC SO-DIMM
Drive Support	60 GB SSD
Expansion Slots	Three M.2 B-Key (USB) 2242/3042 with Nano SIM Slots (4G/ 5G support) One M.2 E-Key 2230 ( Wifi)
System Cooling	One 4-cm PWM system fan
Antenna	8 Antennas : 6 LTE/5G Antenna ( 4 Front + 2 Side ) + 2 Wifi Antenna
I/O Ports	LAN: Four Gigabit Ethernet ports USB: Two USB3.0 ports (rear) Display: One HDMI
Power	60 watt power adapter for 12VDC
Dimensions	3.5" SBC 7.48 x 1.72 x 4.72 in. (190 x 44 x 120 mm) (WxDxH)



[www.cosgrid.com](http://www.cosgrid.com)

[info@cosgrid.com](mailto:info@cosgrid.com)

India , USA

+91 90227 64534,  
+91 86101 44212

*An OEM Network Security Product Company with a focus lies in Secure and reliable Connectivity (4G/ 5G SD-WAN, NG Router Firewall, SASE) along with a Holistic security approach (Advanced Threat Protection, Cloud Security, Zero Trust) and Network Visibility (User Experience Management (UEM) / Digital Experience Management (DEM).*