

ICR-W405 & ICR-405

- ◀ 4G LTE, 2x SIM, WiFi IEEE 802.11 a/b/g/n/ac 2.4G/5G, GPS, 1x GbE WAN, 4x GbE LAN, RS232 COM, RS485, and DI/DO Router
- ▶ 4G LTE, 2x SIM, GPS, 1x GbE WAN, 4x GbE LAN, RS232 COM, RS485, and DI/DO Router

NEW



- Multi-band connectivity with FDD LTE/ TDD LTE/ WCDMA/ LTE Cat 6
- GPS track Drawing, GPS TCP Push
- IEEE 802.11 a/b/g/n/ac, (2.4GHz, 5GHz)
- Mobile & WAN Load Balance
- Enhance security and encryption for authentication and transmission



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A new industrial grade 4G LTE cellular router that come with 4 Gigabit LAN ports and 1 Gigabit WAN port. It supports dual SIM slots for providing failover features, build-in the latest cellular modem supports multi-band of FDD LTE/TDD LTE/WCDMA and LTE Cat 6 mobile connectivity.

IIoT & Location:

High performance IEEE 802.11 a/b/g/n/ac Wireless LAN supports dual band of 2.4GHz or 5GHz antennas. Its GPS function supports TCP Push for tracking and report. Provide serial ports and DI/DO interface can be deployed to collect real-time data transmissions for Industrial IIoT and M2M applications.

Security & Management:

The Router features VPN Tunneling with Firewall and management capability via TR069 and SNMP while providing highly secure authentication, encryption and management to protect data between public and private networks and simplify your complicated solutions for smart city and industrial networking.

Features

- Highly reliable and secure for mission-critical cellular communications
- 2x SIM slots, RS232, RS485 serial ports and DI/DO interfaces
- LED indicators for connection and data transmission status
- Industrial temperature rated from -20 ~ +70°C for use in harsh environments
- Support serial communication protocols for rich connectivity

Specifications

Standard	Cellular MobileComm standard: 4G LTE: FDD-LTE, TDD-LTE 3G: WCDMA GNSS: GPS IEEE802.11 a/b/g/n/ac WiFi Standard IEEE 802.3 10Base-T 10Mbit/s Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gbit/s Ethernet over twisted pair IEEE 802.1Q Virtual LANs (VLAN) IEEE 802.3x Flow Control for Full Duplex IEEE 802.1p LAN Layer 2 QoS for Traffic Prioritization IEEE 802.1X Port based and MAC based Network Access Control, Authentication	Hardware Interface	LAN: 4x 10/100/1000Base-T(X) RJ45 WAN: 1x 10/100/1000Base-T(X) RJ45 Reset Button for device reset 1x RS232 for serial COM port or console configuration (TXD/RXD/GND) 1x RS485 1x DI (Isolated), 1x DO (Isolated) 2x SMA connectors for detachable LTE Antenna 2x RP-SMA for WiFi Antenna (ICR-W405) 1x GPS detachable Antenna
LTE Interface	Cellular MobileComm standard: (Please see order information for optional area and band) 4G LTE: FDD-LTE, TDD-LTE 3G: WCDMA GNSS: GPS Carrier Aggregation: 2 CA LTE Data rate: Cat 6, 300Mbps (download) 50Mbps (upload) 2 x SIM slots	Housing	Rugged metal, Fanless, IP30 protection
WiFi Interface (ICR-W405)	IEEE 802.11 a/b/g/n/ac WiFi Standards 2.4G/5G Selectable 2 x RP-SMA for WiFi Antenna	Dimensions (Dx Wx H)	128 x 38 x 139mm
		Weight	645 g
		Installation	DIN Rail mounting, and wall mounting
		LED Display	SYS: x1 VPN: x1 SIM: x2 (SIM1/SIM2) Cell: x2 (H/L) WiFi: x3 (WiFi/2.4G/5G) (ICR-W405) Per Ethernet port: LNK/ACT
		Power Supply (ICR-W405)	Redundant Dual DC 12/24/48VDC input power, (Removable Terminal Block) 1x Power jack for DC 12VDC power adapter
		Power Consumption	11W (ICR-405) 14W (ICR-W405)

Operating Temperature	-40 ~ 70°C (ICR-405) -40 ~ 60°C (ICR-W405)
Storage Temperature	-40 ~ 85°C
Operating Humidity	10 ~ 95% (non-condensing)
MTBF	114,805 Hours (MIL-HDBK-217)
Warranty	5 Years

Certification	EMC	CE (EN55032, EN55035)
	Safety	EN62368-1
	Shock	IEC 60068-2-27
	Freefall	IEC 60068-2-31
	Vibration	IEC 60068-2-6
Radio (RED)	EN301 489-1/13/-17/-52	
	EN300 328	
	EN301 893	
	EN303 413	
	EN50385	
	EN301 908-1	

Software Specifications

Network Protocols	IPv4, IPv6, IPv4/IPv6 dual stack, DHCP server and client, PPPoE, Static IP, SNTP, GPS sync time, DNS Proxy, VRRP, OSPF, Message Queue Telemetry Transport (MQTT Broker), MQTT Publisher, BGP, Flow (Modbus master <--> MQTT client)
Routing/Firewall	NAT, Virtual Server, DMZ, MAC Filter, URL Filter, IP Filter, VLAN, Static Routing, RIP 1, RIP 2, IPS, Policy Route
VPN	OpenVPN, IPsec (3DES, AES128, AES196, AES256, MD5, SHA-1, SHA256), GRE, PPTP, L2TP
WiFi (ICR-W405)	Authentication support 802.1X and Captive Portal Security with WPA2-PSK (AES) Multiple SSID Maximum 100 user Wireless MAC Filtering Wireless client isolation Wireless Connectivity: WAN WiFi Client

GPS	GPS Track Drawing, GPS TCP Push
Load Balance	LTE Mobile & Ethernet WAN port
Others	DDNS, QoS, UPnP, SMS action
Alarm	DI, DO, SMS, VPN/WAN Disconnect, SNMP Trap, Email, TR069
Management	Web GUI for remote and local management, CLI
	Syslog monitor
	SNMP, TR069
	Remote management via SSH v2, HTTPS Local management via Telnet, SSH v2, HTTP/HTTPS

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4G & WiFi Router
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Application

4G Industrial Router in Remote Monitoring of Medical Equipment

High speed 4G Cat6 wireless communication technology provides reliable, fast data transmission network for mobile medical system, data.

Figure 1 : Video Surveillance over 4G/LTE

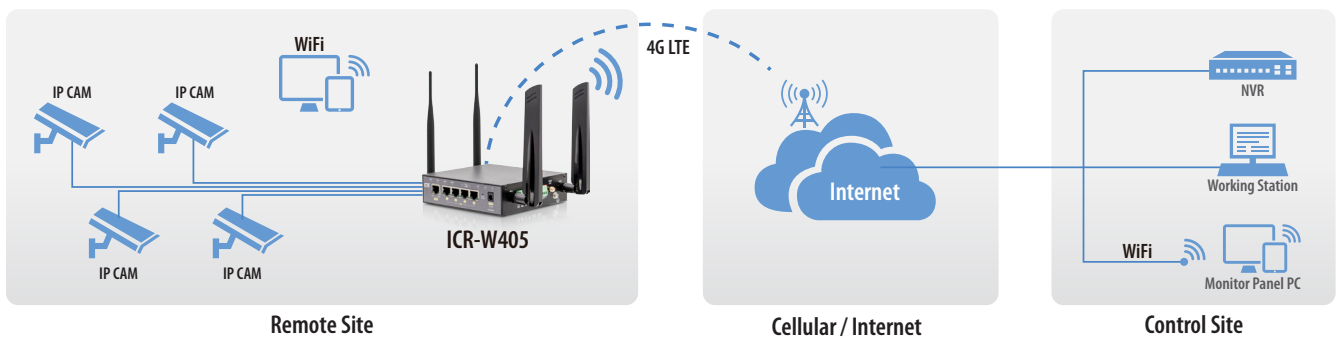
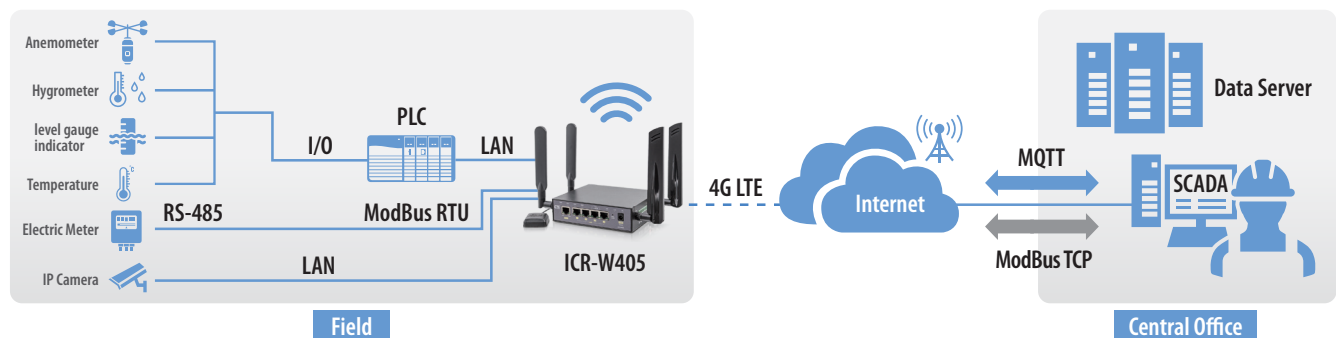


Figure 2 : IOT Environmental Monitoring Application



Ordering Information

Model Name	WAN		Local port					Certification		
	Cellular Mobile Band (2 SIM for Failover)	Ethernet Port	WiFi IEEE802.11 b/g/n/ac	10/100/1000 Base-T(X)	RS232	RS485	DI/DO	Safety EN62368-1	RED	CE
		10/100/1000 Base-T(X) RJ45		RJ45						
ICR-W405-E	see Region code table E	1	1	4	1	1	1x DI, 1x DO	V	V	V
ICR-405-E	see Region code table E	1		4	1	1	1x DI, 1x DO	V	V	V

MobileComm Region Code Options

Region Code		4G LTE		3G	Region
		FDD LTE	TDD LTE	WCDMA	
E	Band	B1(2100) , B3(1800), B5(850), B7(2600), B8(900), B20(800), B28(700), B32(1500)	B38(2600), B40(2300), B41(2500)	B1(2100), B3(1800), B5(850), B8(900)	Europe, Africa, Middle East, Korea,Thailand, India, ANZ, South America, Taiwan
	2x CA	B1 + B1/B5/B8/B20/B28; B3 + B3/B5/B7/B8/B20/B28; B7 + B5/B7/B8/B20/B28; B20 + B32; B38 +B38; B40 + B40; B41 + B41			

Optional Accessories

■ Antenna Accessories

ANT-BASE-01	Antennas Base with Magnetic, SMA (Male) connector, 1.5 meter for 4G LTE extension
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ANT-BASE-01

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