NEW

ICR-W401

4G LTE, WiFi IEEE 802.11 b/g/n MIMO 2T2R Gateway

ICR-401

4G LTE Gateway

CTC Union's ICR-401 and ICR-W401 are compact, lightweight and cost-effective Industrial Grade 4G LTE Cellular Routers that have 1 LAN plus 1 WAN Fast Ethernet connections and support uplink to 2G/3G/4G mobile networks. Built for harsh environments, these routers are equipped with a single RS232 serial port and DI/DO interfaces. The routers are simple to configure through their embedded Web user interface and can be deployed where the collection of real-time data transmissions is required for Industrial IoT and M2M (machine-to-machine) applications. The ICR-W401, with WiFi, is compliant with IEEE 802.11b/g/n wireless connectivity. Both routers feature VPN Tunneling with Firewall and management capability via TR069 and SNMP. Industrial Grade 4G LTE Cellular Routers provide highly secure authentication, encryption and management to protect your data efficiently between public and private networks and simplify your complicated solutions for industrial networking and smart city.

Features

- Highly reliable and secure for mission-critical cellular communications
- Compact and lightweight design with 1 LAN and 1 WAN Ethernet interfaces
- Supports multi-band connectivity with FDD LTE/ TDD LTE/ WCDMA/ GSM/ LTE Cat 4
- Provides IEEE 802.11b/g/n WiFi MIMO 2T2R (ICR-W401)
- Micro SIM connector, RS232 serial 3-wire port and DI/DO interfaces
- LED indicators for connection and data transmission status
- Industrial temperature rated from -40 ~ +75°C for use in harsh environments
- IPv6/IPv4 dual stack and all applications are IPv6 ready
- Support serial communication protocols for rich connectivity
- Enhance security and encryption for authentication and transmission

Specifications

Standard	IEEE 802.3 10Base-T 10Mbit/s Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.1Q Virtual LANs (VLAN) IEEE 802.3x Flow control for Full Duplex IEEE 802.1Q Virtual LANs (VLAN) IEEE 802.1p LAN Layer 2 QoS for Traffic Prioritization IEEE 802.1X Port based and MAC based Network Access Control, Authentication
LTE Interface	Cellular MobilComm standard: (Please see order information for optional area and band) 4G LTE: FDD-LTE, TDD-LTE 3G: WCDMA 2G: GSM/EDGE GNSS: GPS LTE Data rate: Cat 4 1 x micro SIM Connector (push-push type)
WiFi Interface (ICR-W401)	IEEE 802.11b/g/n WiFi Standards Support AP or Station mode 2 x RP-SMA for WiFi Antenna
Hardware Interface	1 x Micro SIM Connector (push-push type) 1 x LAN 10/100 Mbps Ethernet port 1 x WAN 10/100 Mbps Ethernet port Reset Button for device reset 1 x RS232 (TXD/RXD/GND) 1 x DI (Non-Isolated), 1 x DO (Non-Isolated) 2 x SMA connectors for detachable LTE Antenna 2 x RP-SMA for WiFi Antenna (ICR-W401) 1 x GPS detachable Antenna (Optional)

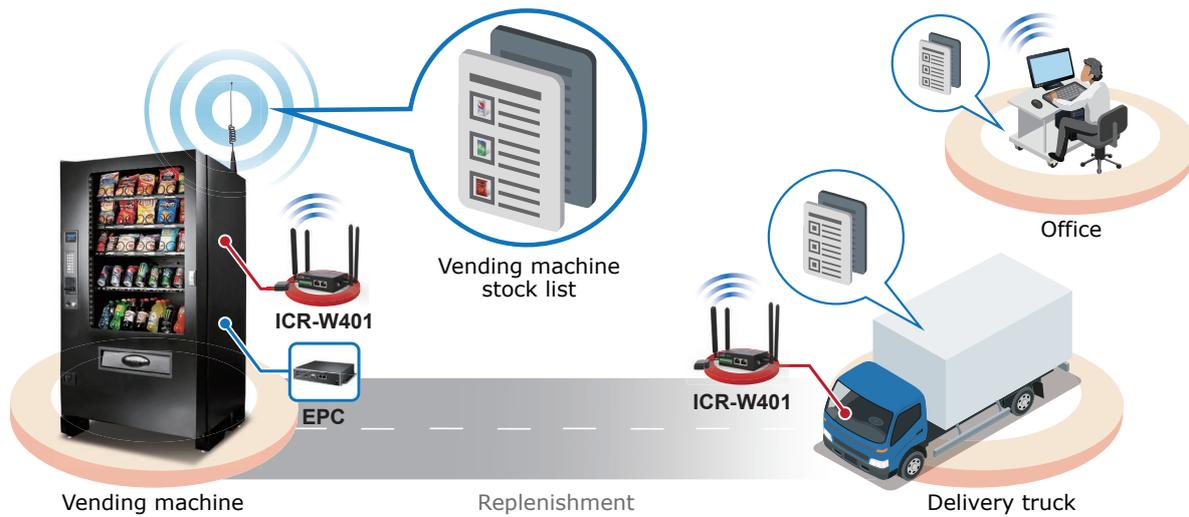|		
Housing	Rugged metal, Fanless, IP30 protection	
Dimensions (W x H x D)	TBD	
Weight	TBD	
Installation	DIN Rail	
LED Display	1 x Power LED 2 x Ethernet LED for each port (LAN/WAN) 1x LTE LED 1 x Function LED (User define by Web)	
Power Supply	Power Consumption	5 Watts(Max)
	Power Input 8 ~ 36VDC	
Operating Temperature	-40 ~ +75°C	
Storage Temperature	-40 ~ +85°C	
Operating Humidity	10 ~ 95% (non-condensing)	
MTBF	TBD	
Warranty	5 Years	
Certification	EMC	CE (EN55032 + EN55024)
	EMI	FCC part 15 subpart B class A, CE (EN55032)
	Shock	IEC 60068-2-27
	Freefall	IEC 60068-2-32
	Vibration	IEC 60068-2-6

Software Specifications

Network Protocols	IPv4, IPv6, IPv4/IPv6 dual stack, DHCP server and client, PPPoE, Static IP, SNTP, GPS sync time, DNS Proxy, Modbus, VRRP, OSPF, Message Queue Telemetry Transport (MQTT Broker), BGP
Routing/Firewall	NAT, Virtual Server, DMZ, MAC Filter, URL Filter, IP Filter, VLAN, Static Routing, RIP 1, RIP 2
VPN	OpenVPN, IPSec (3DES, AES128, AES196, AES256, MD5, SHA-1, SHA256), GRE, PPTP, L2TP
Others	DDNS, QoS, UPnP

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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2019   v2.0
www.ctcu.com / sales@ctcu.com
Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

Application

The vending machine logistics system application

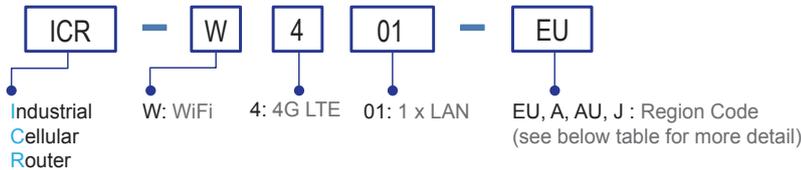Vending machine stock list

Office

ICR-W401

EPC

ICR-W401

Vending machine   Replenishment   Delivery truck

Ordering Information

Model Name	Managed	WAN		Local port				Certification		
		"Cellular Mobil Band (2 Sim for Redundant)"	"10/100 Base-TX"	"WiFi IEEE 802.11 b/g/n"	"10/100 Base-TX"	RS232	DI/DO	CE	FCC	Shock, Freefall, Vibration
ICR-W401-EU	V	see Region code table EU	1	1	1	1	1	V	V	V
ICR-W401-A	V	see Region code table A	1	1	1	1	1	V	V	V
ICR-W401-AU	V	see Region code table AU	1	1	1	1	1	V	V	V
ICR-W401-J	V	see Region code table J	1	1	1	1	1	V	V	V
ICR-401-EU	V	see Region code table EU	1		1	1	1	V	V	V
ICR-401-A	V	see Region code table A	1		1	1	1	V	V	V
ICR-401-AU	V	see Region code table AU	1		1	1	1	V	V	V
ICR-401-J	V	see Region code table J	1		1	1	1	V	V	V

Model Naming Rule

ICR – W 4 01 – EU

Industrial **C**ellular **R**outer

W: WiFi

4: 4G LTE

01: 1 x LAN

EU, A, AU, J : Region Code (see below table for more detail)

MobilComm region Code Optional

Region Code	4G LTE		3G	2G	Region
	FDD LTE	TDD LTE	WCDMA	GSM / EDGE	
EU	B1(2100), B3(1800), B5(850), B7(2600), B8(900), B20(800)	B38(2600), B40(2300), B41(2500)	B1(2100), B5(850), B8(900)	B3(1800), B8(900)	Europe, Africa, Middle East, Korea,Thailand, India
A	B2(1900), B4(1700), B12(700)		B2(1900), B4(1700), B5(850)		USA (AT&T, T-Mobil)
AU	B1(2100), B2(1900), B3(1800), B4(1700), B5(850), B7(2600), B8(900), B28(700)	B40(2300)	B1(2100), B2(1900), B5(850), B8(900)	B2(1900), B3(1800), B5(850), B8(900)	ANZ, South America, Taiwan
J	B1(2100), B3(1800), B8(900), B18(850), B19(850), B26(850)	B41(2500)	B1(2100), B6(850), B8(900), B19(850)		Japan

Optional Accessories

■ Antenna accessories

ANT-BASE-01	Antennas Base with Magnetic, SMF (Male) connector, 1 meter extention
ANT-GPS-01	Antennas for GPS

■ Wall mount kit accessories

IND-WMK03	Wall Mount kit for Industrial product (Compact, 150x 30mm)

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