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Overview

The WCRU-Gateway is a compact and ruggedized Gateway Unit housed in a IP54 metal casing and supports a wide range of operating temperature from -25°C to +70°C. It meets the vibration, impact and shock resistance requirement under stringent transportation standards, and is certified to Train Standard.

Key Features

Interface Gateway
➤ Ethernet Gateway between CCTV Recorder and Transmission Medium (Wired or Wireless)
➤ Simple way to transmit I/O data between any two industrial networks
➤ Additional parameter data supported (depending on network combination

Management
➤ Supports SNMP V3 (read and write)
➤ Supports firmware upgrade on the fly
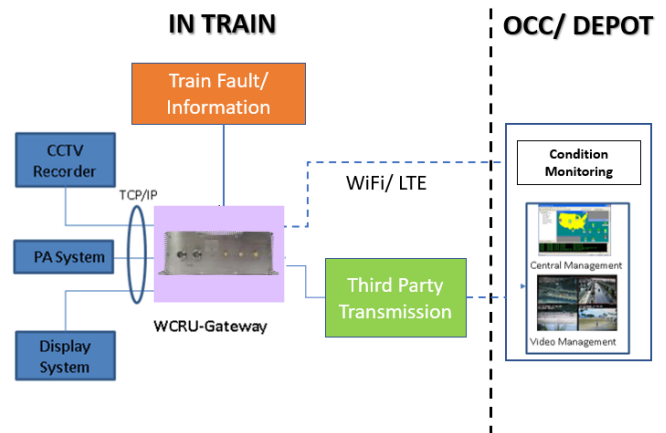➤ Provides user authentication with password protection

Multiple ports
➤ 1x Gigabit LAN Port + 1x Gigabit WAN Port (Optional 4x Gigabit LAN Port)
➤ With kinds of ports, like LAN, the Gateway can connect with various of accessories, such as CCTV NVR, Display, panic button Public Address system for information transfer from site to Control Centre

Suitable for Train Usage
➤ Industrial grade with wide operating temperature range: Asia: 0°C to 70°C; Europe: -25°C to 70°C
➤ Certified to In-Train EN50155 and IEC61373 standard

The WCRU-Gateway, operating as communication gateway of the vehicle, enables Access Control Security with User ID and Password with audit trail to remote stations for any kinds of applications in the train which can be connected via its customizable communication suite. Multiple devices can directly be attached to the WCRU-Gateway by using the integrated 5 Ethernet.

The router software is based on well proven components and standard communication protocols. The device is administrated via web browser or command line.

Our WNCS-233 NMS can be used to remotely manage the WCRU-Gateway, such as remote configuration to interface with customer programs, firmware upgrade-on-the-fly, central device configuration, heartbeat monitoring, etc. The WCRU-Gateway is qualified for operating under harsh environmental conditions defined by EN 50155.

The WCRU-Gateway offers wide range of Transmission features such as Secured wireless fast data transfer and LTE Slot for 4G SIM .

Optional Features

• Supports network based storage for data and video.
• Provides wireless fast data transfer and fast seamless roaming with QoS and data Bandwidth Management
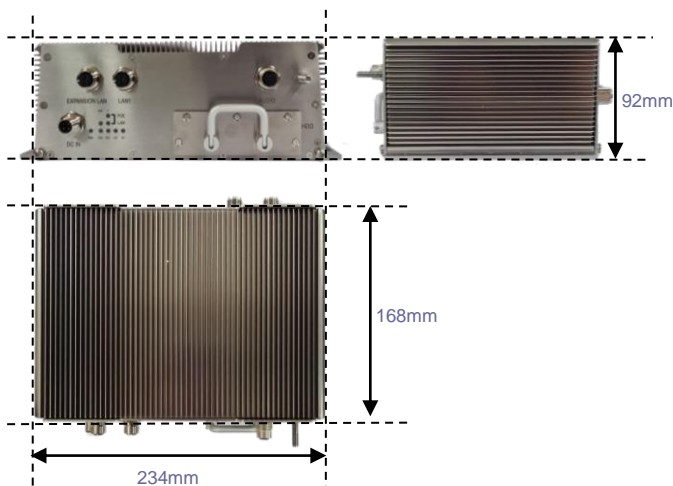
Application

- Data Acquisition and Communication Tool
- Interface between Recorder and Transmission medium (Wired or Wireless) to Central Command Centre
- Gateway between multiple devices within Train

Interfaces
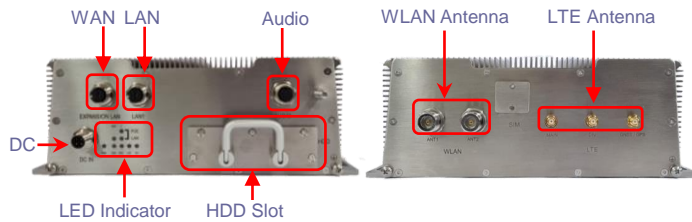
Dimension

92mm

168mm

234mm

General

Dimension LxWxH	234mm x 168mm x 92mm (Excluding Mounting)
Weight	4.1 KG
Power Consumption	Typical: 23W Max: 28W
Compliance	iMDA, RoHS

Environmental and Reliability

IP Rating	IP 54
Operating Temperature	-25°C to 70°C
Storage Temperature	-40°C to +80°C
Humidity	10%~90% Max Non-Condensing
EN50155	EN 50121-3-2 Compliance EN 61373 Shock Vibration EN 60068-1/2/30 Climatic

Interface

Power IN	2 Pin Industrial Connector Typical: 110V DC (48V ~ 160V DC)
EXPANSION LAN Port (WAN Port)	1x 10/100/1000 Mbps WAN Port M12 X-Coded Connector
LAN1 Port	1x 10/100/1000Mbps LAN Port M12 X-Coded Connector
HW RESET Button	Pinhole
RF Ports	WiFi: 2x N(F) LTE: 3x SMA (F)
Power LED	Power Up Status
Storage Type (Form Factor)	SSD / HDD (2.5"), 2 Slot
MIC Input (MIC Not Included)	1 x Mic Input Port

Network Security & Management

Firewall	Stateful Firewall
DHCP	- Built-in DHCP Server and Client - Support IP Address Reservation
VPN	- Built-in VPN Client
File Uploader	- Support Secured FTP, FTPS, SFTP Transfer - Support Up To 3 FTP Server Address
Management	Web Configuration, SSH, SNMP V3, File Based Configuration
Generic Routing Encapsulation	Support GRE Tunneling

Wireless LAN

Wireless LAN Standards & Data Rate (Varies According To Model)	2x2 MIMO Radios: IEEE 802.11a/b/g/n/ac Data Rate: Up to 867Mbps
WLAN Operating Mode	Infrastructure, Repeater and Client
Operating Frequencies	2412 – 2475 GHz 5.150 -5.875 GHz
Operating Channels	Supported Channels Will Depend On The Country.
Security	Government-Grade Security Support, Including WEP, TKIP / AES / WPA And WPA2
Trusted Platform Module TPM	FIPS-140-2 Certified (Optional)
Support Frequency Shift	Yes

LTE (Optional)

LTE Module	1x LTE Module
Support 3CC Carrier Aggregation	Yes
Theoretical Upload/Download Throughput	Upload: Up to 150Mbps Download: Up to 300Mbps

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