WCRU-III Series

Ruggedized Camera Recording Unit



Overview

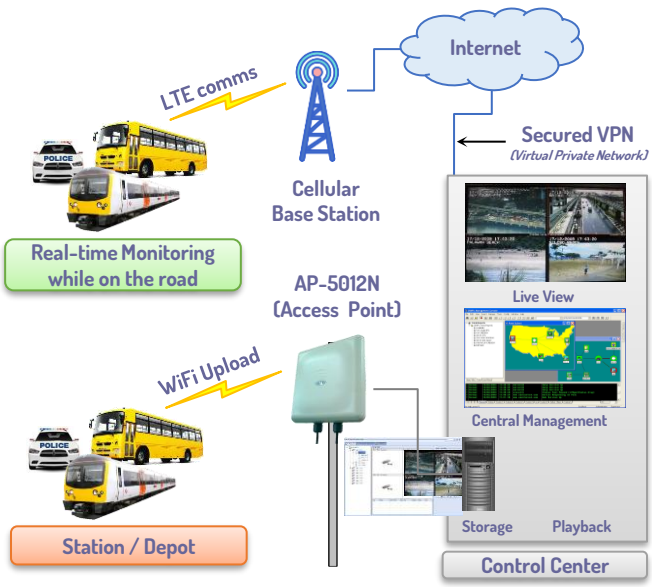
The WCRU-III is a ruggedised camera recording unit designed for confined train environments subject to extreme temperatures and vibration. It is certified under stringent Train Standards for operating temperature, vibration, impact and shock resistance.

Key Features

- Supports up to 18 cameras*, 24 x 7 continuous recording
- Recording format: JPEG / JPEG-XR images (1~3 fps), H.264 video (1~30 fps)
- Supports local, network based & remote storage
- Password-protected authentication
- Automatic file and disk management to ensure continuous recording, including after restart.
- WLAN radio for communication between vehicles and from vehicles to base/station.
- WLAN Operating modes: Access Point, Bridge Client, and Repeater
- Supports fast wireless data transfer & fast seamless roaming
- Accelerometer *(Optional).*
- Dual band 2.4/5GHz, 3x3 MIMO, data rate up to 1.3Gbps*
- QoS IEEE 802.11e, TCP/IP data bandwidth limitation
- WPA/WPA2-Personal & Enterprise, WEP, 802.1x authentication
- SNMP V3; OTA & scheduled firmware upgrades through NMS
- Operating temperature: -25°C to 70°C

Applications

- CCTV Surveillance In-Train/Bus/Truck/Police Car/ Boat
- In Vehicle WiFi Hotspot
- GPS Tracking With Video



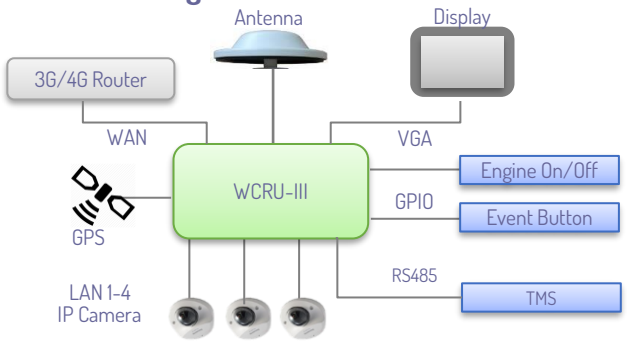
At depot/terminal, recorded data auto-uploads to the Control Centre via WiFi.

On the move, 3G/4G LTE enables live camera viewing, equipment monitoring, and video access. Optional GPS tracks position and time-stamps recordings for forensic use.

RWAS provides secure VPN-based live viewing/playback. NMS enables remote status monitoring, configuration, and firmware updates.

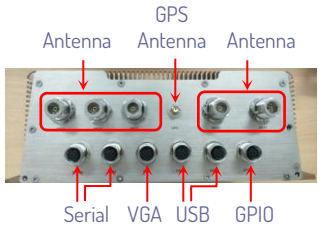
** Model dependent*

Connection Diagram



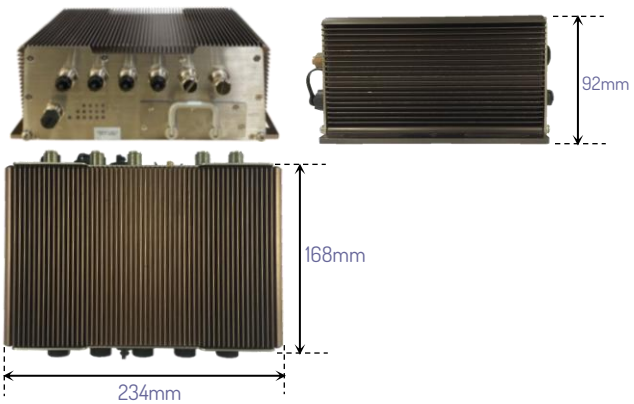
Interfaces **





*** Models shown are for illustration purposes only. Please consult us for the model best suited to your application requirements.*

Dimension



Interface

Power Input	2 Pin Industrial Connector
WAN Port	Industrial RJ45 or M12 Connector (Model dependent)
Up to 4 LAN Ports (Model dependent)	Industrial RJ45 Connector (18C: Software Controllable Power On/Off)
Serial Port	Supports RS-232, RS-485
USB (Host)	Refer to Table
HW RESET Button	Pinhole
RF Antenna Ports	WiFi: N(F) / GPS: SMA (F)
Power LED	Power Up Status
Recording LED	Recording Status
Display Output	VGA (18C Optional)
Storage Type (Form Factor)	2.5" SSD / HDD
Input And Output Ports	8 x GPIO Port (4 Input And 4 Output)
MIC Input (MIC Not Included)	1 x Mic Input Port
Audio Output	1 x Audio Output Port

General

Dimensions (mm)	234L x 168W x 92H (exclude mounting)
Weight	3.4 kg
Power Consumption	Typical: 17W Maximum: 19W
Compliance	CE, iDA, RoHS

Environmental & Reliability

IP Rating	IP 54
Operating Temperature	-25°C to 70°C
Storage Temperature	-40°C to 80°C
Compliance	10%-90% Max, Non-condensing
EN 50155	EN 50121-3-2 EMC/EMI EN 61373 Shock Vibration EN 60068-1/2/30 Climatic
Regulatory	CE

Wireless LAN / Network

Wireless LAN Standards	MIMO Radio	Data Rate
IEEE 802.11 a/b/g/n/ac	3x3	Up to 1.3 Gbps
IEEE 802.11 a/an/ac	2x2	Up to 867 Mbps
IEEE 802.11 b/g/n	2x2	Up to 300 Mbps

WLAN Operating Modes	Infrastructure, Repeater or Client
Operating Frequencies	2.400 – 2.4835 GHz and / or 5.150 – 5.850 GHz
Operating Channels	Supported operating channels depends on country of use
Security	Government-grade Security Support, including WEP, TKIP / AES / WPA and WPA2
Trusted Platform Module TPM	FIPS-140-2 Certified (Optional)
Crypto-authentication	Ensures things and code are real, untampered and confidential

Function

Recording	JPEG or JPEG-XR (1-3 fps) H.264 (1-30 fps)
Image Security	AES Encipher For JPEG or JPEG-XR
Management	Web Configuration, SSH, SNMP V3, File-based Configuration
Web Configuration	Recording Type Frame Rate Live View WLAN Setting Recording On / Off Export Video through USB Port
VPN	Government-grade Security Support, including WEP, TKIP / AES / WPA and WPA2
FTP / FTPS	FIPS-140-2 Certified (Optional)

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