# CSL
## CONVERGENCE SYSTEMS LIMITED

**PLUG & PLAY INTELLIGENT READER**

## CS463 INTELLIGENT READER

CS463 is the next generation of intelligent fixed readers from CSL. Offering an event engine with multiple layer nested logic for full embedded business automation. The CS463 offers an edge server to allow easy HTTP access for configuration, status monitoring, and direct RFID inventory. Offering cloud server connectivity for fully synchronized operation anywhere, and allowing remote installation and configuration. The CS463 has a rich API including the CSL HTTP/XTML protocol with full event engine management, CSL Unified Protocol, LLRP Protocol and MACH1 Protocol.

## PRODUCT FEATURES:

**Buit in Event Engine for Intelligent Automation & IoT integration.**

**4 RP Female SMA Antenna Ports.**

**Long read range of 22 meters - tag reader & environment dependent**

**High read rate 800 tags/second (Using Reader Mode=3: Maximum Throughput Mode).**

**Dense Reader Mode DRM available.**

**Ethernet connectivity with PoE+ (IEEE.802.3at).** Note: will only work with PoE "at".

**WiFi 802.11 b/g/n** with **WPA2-PSK (AES), Bluetooth 4.0**

### Event Engine Highlights:
Create custom logic for each event
Run simulataneous events
Interface with GPIO, USB and Serial
Reference strored tag lists
Triger action if tag read matches list
Activate light stack, gate, alarm etc.
Run events while offline

### Custom Embedded RFID:
Load custom code using your programming language of choice. Turn the CS463 into an edge server.

### 5 APIs Supported:
CSL HTTP/XML
CSL Unified
CS108 Bluetooth
LLRP
MACH1

**TLS security with digital certificate using AES256 encrytion.**

**\*Example code for Custom Embedded RFID is preloaded.**

**GPIO** Optically Isolated

Cloud-friendly

Event engine automation

Open Linux Embed Custom Code

Connectivity

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Sales & Support, America

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WiFi

Bluetooth

CS463

Power
RFID Read

Port 0   Port 1   Port 2   Port 3

152 mm
208 mm

272 mm

24 mm

Order Code for Frequency Regulations: CS463-N
N=**1**   865-868 MHz (Europe) & 865-867 MHz (India)
N=**2**   902-928 MHz US, Canada & Mexico
N=**2 AS**   for 920-926 MHz, Australia only
N=**2 NZ**   for 921.5-928 MHz, New Zealand only
N=**2 OFCA**   for 920-925 MHz, Hong Kong only
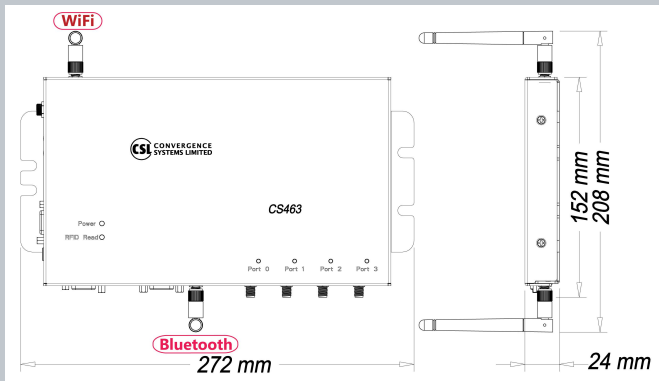N=**2 RW**   for 902-928 MHz, Rest of the world that are
            subset of this band: e.g. Philippine, Brazil, Peru,
            Uruguay, Singapore, Thailand, etc.
N=**4**   922-928 MHz, Taiwan
N=**7**   920-925 MHz, China, Malaysia, etc.
N=**8**   916.7-920.9 MHz, Japan
N=**9**   915-921 MHz, Europe Upper Band

## Applications

| | | |
|---|---|---|
| Student Monitoring | Asset Management | Auto Gates |
| Quality Control | Personnel Tracking | Vehicle Monitoring |
| Logistics | Remote Monitoring | Animal Tracking |
| Vehicle Mounted Reader | Waste Disposal Mangement | Cold Chain Management |

Contact us at  **info@convergence.com.hk**
or visit our website at   **www.convergence.com.hk**

| | |
|---|---|
| Dimensions and Weight | Length: 272 mm (10.71 in); Width: 152 mm (5.98 in.); Thickness: 24 mm (634 in); Weight: 0.72 kg |
| Edge Software | Edge server with intelligent event engine, and accepting 5 API's: CSL HTTP/XML, CSL Unified, LLRP, MACH1 and CS108 Bluetooth |
| Operating System | Linux |
| Processer | Dual Core Arm Cortex® -A9, 1GB DDR3 RAM, |
| Read Range ot RFID | Read distance up to 22 meters which is tag, reader antenna and environment dependent |
| Protocol | ISO18000-6C, EPC UHF Class1 Gen 2 Dense Reader Moda available  (Class 3 Gen 2 compliant) |
| Frequency Range | One of the following 865-868 MHz, 865-867 MHz, 902-928 MHz, 922-928 MHz, 920-925 MHz, 915-922 MHz |
| External Control | 4xGPO and 4xGPI, Optically Isolated, additional isolated 12V output |
| Environment | Operating Temp: -20° C to 50° C (-4° F to 122° F° ) Storage Temp: -40° C to 85° C (-40° F to 185° F° ) Humidity: 98% Non-condensing |
| Connectivity | Ethernet, Serial (RS232), USB Host, USB Client, WiFi 802.11 b/g/n with WPA2-PSK (AES), Bluetooth 4.0 |
| Power Supply | DC Supply (12V,5A), or PoE+(IEEE802.3at) (will only work with PoE "at") |