



# CS203X Integrated Intelligent Reader



## Product Features

**Built in Event Engine\*** for Intelligent Automation and IoT integration.

**1 Internal Antenna & 1 External Antenna Port.**

**IP68 Rating.**

**Long read range of 22 meters - tag, reader antenna and environment dependant.**

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

**Dense Reader Mode (DRM) available.**

**Ethernet connectivity with PoE+ (IEEE802.3at). Note: Will only work with PoE "at".**

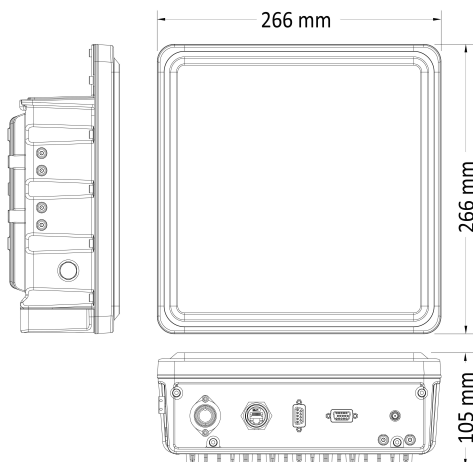
**4 APIs supported: CSL HTTP/XML, CSL Unified, LLRP, and MACH1.**

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

**Advanced security IoT IC embedded.**

**2 Year Standard Warranty.**

**\*details of event engine in CSL website.**



CS203X is the next generation of ruggedized IP68 intelligent integrated readers from CSL. Offering an event engine with multiple layer nested logic for full embedded business automation. The CS203X offers a powerful edge server to allow easy HTTP access for configuration, status monitoring, and direct RFID inventory. Offering Cloud server connectivity for fully synchronized ubiquitous operation anywhere, and allowing remote installation and configuration (demonstration purpose only, user can use sample source codes to port to their own Cloud). CS203X has a rich API compatibility portfolio, including the CSL HTTP/XML protocol with full event engine management, CSL Unified Protocol, LLRP Protocol, and MACH1 protocol. The CS203X reader connects to sensors and peripherals via its optically isolated GPIO, USB, Ethernet and serial connections. The event engine\* inside CS203X integrates all these sensors and RFID inventory operation seamlessly to attain sensor fusion so that business processes can be further programmed inside the CS203X to make decisions and then in turn effect external peripherals, such as activating stack lights, gate barriers, etc. CS203X has a fully open Linux OS for ease of application development.

## Applications

Vehicle mounting  
Student monitoring  
Logistics  
Quality control

Waste disposal management  
Personnel tracking  
Cold chain management  
Asset management

Auto toll gates  
Animal tracking  
Vehicle monitoring  
Remote monitoring

## Dimensions and Weight

Length: 266 mm (10.47 in); Width: 266 mm (10.47 in); Thickness: 105 mm (4.13 in); Weight: 3.00 kg

## Edge Software

Edge server with intelligent event engine, and accepting 4 APIs : CSL HTTP/XML, CSL Unified, LLRP, and MACH1

## Operating System

Linux

## Processor

Dual Core Arm Cortex®-A9, 1GB DDR3 RAM, 16GB Flash

## Read Range of RFID

Read distance up to 22 meters which is tag, reader antenna and environment dependent

## Protocol

ISO18000-6C, EPC UHF Class 1 Gen 2, Dense Reader Mode 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

## IoT Security

Advanced security IC embedded for IoT Plug & Trust Deployment

## External Control

4 x GPO and 4 x GPI, 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

## Dust & Water Proof

IP68

## Connectivity

Ethernet

## Power Supply

DC supply (12V,5A), or PoE+(IEEE802.3at)(will only work with PoE "at")

## Mounting Style

100 x 100 mm VESA M6 Threaded Holes (M6 Screws provided)

## Order Code

CS203X-**N**

N=1: 865-868 MHz (Europe) & 865-867 MHz (India)

N=2: 902-928 MHz, USA & Canada & Mexico only (hopping frequencies locked)

N=2 **AS**: for 920-926 MHz, Australia only (hopping frequencies locked)

N=2 **NZ**: for 921.5-928 MHz, New Zealand only (hopping frequencies locked)

N=2 **OFCA**: for 920-925 MHz, Hong Kong only (hopping frequencies locked)

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

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