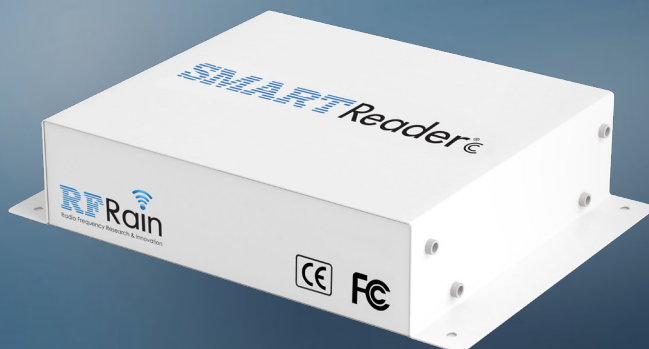


RFR-RAIN-4-SMART-C SMART READER

We provide system integrators and customers with the world's first plug and play smart reader that is extremely reliable and easy to deploy and integrate in your existing solutions using Rest API.



Key Features & Benefits

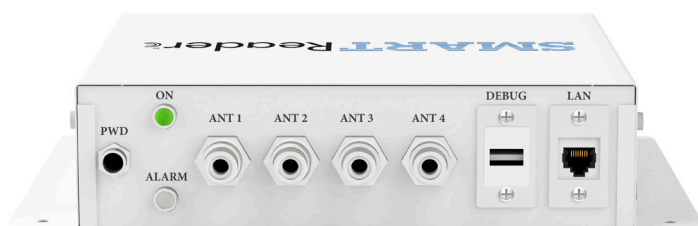
- ▶ True plug and play. Start reading your tags automatically using a browser and the built-in Zone Manager UI software.
- ▶ Zone Manager UI software included.
- ▶ Store and access the tag data directly on the reader, on a server on-premise or in the cloud.
- ▶ Setup and receive JSON push notification alerts based on custom rules.
- ▶ Read assets at high-speed using the Smart Reader Fast Track option.
- ▶ Push the data automatically to the RFRain Web Services (RWS), Amazon Web Services (AWS), or Azure using the push alert notification feature.
- ▶ Control, Configure, and access the data using the RFRain Rest API, Python, .Net, and C++ SDK.

Applications

- ▶ Inventory Management
- ▶ Asset Tracking
- ▶ Personnel Tracking
- ▶ Conveyor belts
- ▶ Smart Cabinets
- ▶ Warehousing
- ▶ Toll detection

OVERVIEW

The award winning RFRain Reader (RFR- RAIN-4-SMART) supports up to four monostatic antennas, which covers a tag read distance that is over 80 feet with 9 dBiL antenna. The large number of ports allows to track a maximum of 4 zones using one reader. Some of the features include camera, or GPS, and or Access Point to directly access the reader using its built-in WIFI. Read 1000's of tags in seconds and detect movement of assets in and out of zones at a very fast rate. Configure the readers in minutes using the built-in Zone Manager UI. Start reading tags automatically, and store up to 200K unique events at a time. Create the next generation of smart stores, track movement inside multiple zones, and much more. Reader comes pre-installed with the built-in Zone Manager Software UI. No programming necessary.



DATA/CONTROL INTERFACE	
Communication Protocol	RFRain Rest API Interface, Python, .Net, C++ SDK's
Software	The Zone Manager software comes pre-installed and pre-configured with the RFR-RAIN-4-SMART. See extensive features' list from the RFR-ZM software specs
RSSI	Yes
Modes of operation	Server Mode: detect fast moving assets on a toll station, conveyor belt, or entry and transit doorway. Server Mode Enhanced: Automatically access user data, Extended EPC or TID data. Write Mode: Easily modify the content of user data or EPC info in bulk.
Brown-out Recovery	Yes
Live Upgrade Capability	Yes
Interface	Standalone: Configure and access the data using the built-in Zone Manager UI from any web browser
RF INTERFACE	
Regulatory	Supports different regions based on the order number. Please refer to the order information below
Tag Protocol	EPC-global UHF Class 1 Gen 2 (ISO 18000-6C) with anti-collision, DRM, and advanced anti-jamming
Antenna Connector	4 RP-TNC female monostatic ports
RF Power Output	Separate read and write levels, value is adjustable from 10 dBm to 30 dBm power up to (1.4 W) per channel or the maximum that the region allows whichever is less
ARCHITECTURE	
RFID Processor	Indy R2000
Memory	1 GB RAM, up to 64 GB Extended Flash
POWER	
DC Power required	DC Voltage: 5 V \pm 5%; DC power: 24W max when transmitting
PHYSICAL	
Dimensions	6" x 8" x 2" / 15.2 x 20.03 x 5.8 cm
Weight	2.5 lb / 1.1 kg
Interface	USB 2.0, Ethernet TCP/IP (RJ45), WIFI, Access Point, and POE+. Cellular available on demand
Enclosure Material	Sheet Metal
Mount Type	Four 1/4" Mounting holes
ENVIRONMENT	
Certification	US, Canada and other regions following U.S. FCC. Europe and other regions following ETSI EN 302 208 China , Korea , Malaysia
Operating Temp.	-20°C to +65°C
Storage Temp.	-40°C to +85°C
PERFORMANCE	
Max Tag Read Rate	Up to 700 tags/second
Max Tag Read Distance	Up to 80 feet (24 m) with 9 dBiL antenna
Max Tag Read Rate for moving objects	100 items at walking speed 25 items at 25 mph
Max Tag Read Rate for static objects	1000 tags in 2 seconds.
OPTIONAL FEATURES	
Hardware	GPS: External GPS available. Camera: 1 MP Camera. (GPS feature is not standard and must be requested when product is ordered) Access Control: Control access to a doorway. Alert: Send audible alerts based on a user alert setting.
Software	The Zone Manager software comes pre-installed and pre-configured with the RFR-RAIN-4-SMART. See extensive features' list from the RFR-ZM software specs
Order Information	Based on the reader prefix RFR-RAIN-4-SMART-C-XX, pre-configured for the following regions: XX: CE: European Frequency 865-868 MHz NA: North American Frequency 902-928 MHz KO: Korean Frequency 908.5-914 MHz AU: Australian Frequency 915-928 MHz CH: Chinese Frequency 915-928 MHz