

# RFR-RAIN-4-SMART

## 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 all at an unbeatable price.



### Key Features & Benefits

- True plug and play. Start reading your tags automatically using a browser and the Zone Manager software on the Smart Reader.
- Zone Manager software included.
- Store and access the data directly on the reader, on a server on-premise or in the cloud.
- Setup and receive alerts based on custom rules.
- Read assets at high speeds using the Smart Reader fast track option.
- Never send a wrong shipment using the Smart Reader Order Accuracy Manager.
- Control the reader using the latest standard Rain Communication Interface (RCI) Rest API.

### Applications

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

### OVERVIEW

The RFRain Smart 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. It supports the tag reading speed for moving objects at 100 mph. Access and control the reader from any browser using the built-in UI. Access the reader via Ethernet or WIFI. The reader supports the latest RCI standard from the Rain Alliance. The reader also contains a database, and can send alerts via text or e-mail in real time. Users can detect fast moving assets in doorways, create the next generation of smart cabinets or smart stores, determine the movement of assets and people effortlessly with our built-in Zone Manager. No programming necessary.



# RFR-RAIN-4-SMART

## DATA/CONTROL INTERFACE

Physical	USB WIFI Cellular Ethernet
Communication	RCI RAIN Communication Interface
Software	RFR-ZM. See extensive features list from the zone manager software specs
RSSI	Yes
Modes of operation	Fast Asset Tracking: detect fast moving assets on toll stations or conveyor belt up to 100 mph Checking: Automatically add newly discovered assets in database, and customize content Discovery: Detect the movement or presence of assets in doorways and cabinets
Temperature Monitoring	Automatic shutdown during high or low temperature
Brown-out Recovery	Yes
Live Upgrade Capability	Yes
Interface	Standalone: Configure and access the data using the built-in UI from any web browser RFR-GW: Configure and access the data from the RFR Gateway in large installations

## RF INTERFACE

Antenna Connector	Four 50 $\Omega$ MMCX connectors supporting four monostatic antennas
RF Power Output	Separate read and write levels, command adjustable from 5 dBm to 31.5 dBm (1.4 W) with $\pm 0.5$ dBm accuracy above +15 dBm <sup>1</sup>
Regulatory	Pre-configured for the following regions: FCC (NA,SA), ETSI (EU, India), TRAI (India), KCC (Korea), ACMA (Australia), SRRC-MII (P.R.China), Open (customizable) 865-869 MHz and 902-928 MHz

## ARCHITECTURE

RFID Processor	Indy R2000
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## POWER

DC Power required	DC Voltage: 5 V $\pm$ 5%; DC power: 24W max when transmitting
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## ENVIRONMENT

Certification	FCC 47 CFR Ch. 1 part 15 Industrie Canada RSS-21 0 ETSI EN 302 208 v3.1.1 (RED 2014/53/EU)
Operating Temp.	-40°C to +60°C
Storage Temp.	-40°C to +85°C

## PHYSICAL

Dimensions	6" x 7" x 1.77"
Weight	4 lbs of heavy aluminium material

## PERFORMANCE

Max Tag Read Rate	Up to 750 tags/second
Max Tag Read Distance	over 80 feet (24 m) with 9 dBiL antenna
Max Tag Read Rate for moving object	100 mph with fast asset tracking software (not included)

## ADDITIONAL FEATURES

Extended Flash	Up to 512 MB of additional storage internal
GPS	GPS support