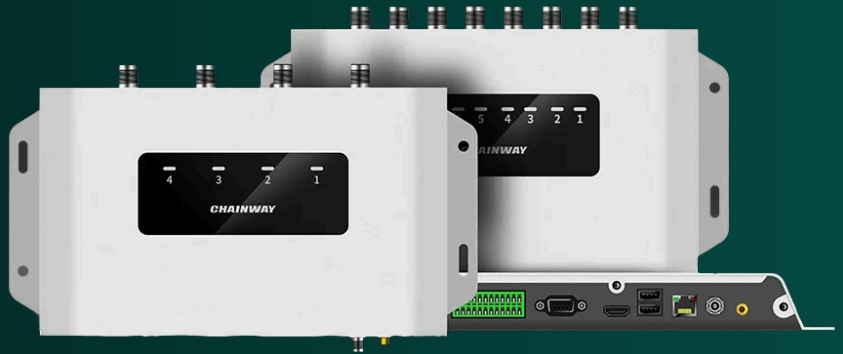# IDCR@FT
RFID & NFC EXPERTS

UHF | RAIN - Stationary Reader
CHAINWAY - UR300

- EPC Class 1 Gen2 / ISO 18000-6C compliant
- Quad-core 2.0 GHz processor
- Impinj E Series chipset with Gen2X support
- High-speed tag reading up to 1300+ tags/sec
- RS-232, Ethernet, USB, HDMI, GPIO

UHF | RAIN - Stationary Reader
Advanced Reader for Complex Environments

The Chainway U300 is a next-generation fixed UHF RFID reader designed for applications requiring high processing performance and flexible system integration. Running Android 11 on a quad-core 2.0 GHz platform, the U300 provides powerful local data processing combined with high-speed UHF RFID performance.

Powered by Impinj E Series chips with Gen2X support, the U300 delivers reliable tag reading in complex RF environments. Comprehensive communication interfaces, multi-antenna support and flexible power options enable seamless integration into industrial, logistics and retail systems where stability and scalability are critical.

Common Applications

- Warehouse and logistics management
- Library systems
- Production line management
- Laundry and linen tracking
- Smart storage and inventory control

CHAINWAY

TECHNICAL SPECIFICATIONS

Physical Characteristics

Dimensions	247 x 151 x 35mm / 9.72 x 5.94 x 1.38in
Weight	1000g / 35.27oz. (Host Only)
Material	Aluminium alloy
Input Voltage	DC 10V – 24V
Standby Current	< 140mA
Work Current	600mA +/-5% @ DC 24V Input
Comm Interface	1 x RS-232 , 1*RJ45, 1 x USB Host, 1 x USB Device
Display Interface	HDMI Type A, support 720P HD video output
GPIO	4 x input optocouplers, 4 x output optocouplers, with isolation
Baud Rate	115200 bps
Cooling Mode	Air cooling
Power	DC (24V), POE (802.3af 13W), POE+ (802.3at 25.5W)

Performance

CPU	Quad-core, 2.0GHz
RAM+ROM	2GB + 16GB

Developing Environment

Operating System	Android 11
SDK	Support Software Development Kit
Language	Java
Tool	Eclipse/Android Studio

Communication

Ethernet Interface	10/100 Base-T Ethernet (RJ45)
WLAN	IEEE802.11 b/g/n, 2.4G
Bluetooth	Bluetooth 4.0

UHF

Engine	Based on Impinj E Series chips
Impinj Gen2X	Supported
Protocol	EPC global UHF Class 1 Gen 2 / ISO 18000-6C
Frequency	865-868 MHz / 920-925 MHz / 902-928 MHz
Output Power	1W (30dBm, support +5~+30dBm adjustable, POE/DC power)
	2W Optional (33dBm, support +10~+33dBm adjustable, POE+/DC power, for Latin America)
Output Power Precision	+/- 1dB
Output Power Flatness	+/- 0.2dB
Receive Sensitivity	< -84dBm
Fastest Read Rate	1300+ tags/sec
RSSI	Supported
Ambient Temp Monitor	Supported
Antenna Detector	Supported
Antenna	Supporting a variety of antennas, such as 6dBic, 9dBic, etc
Antenna Port	4 / 8 Channel 50Ω RF Connector RP-TNC Female

User Environment

Operating Temp.	-25°C to 65°C / -13oF to 149°F
Storage Temp.	-40°C to 85°C / -40oF to 185°F
Humidity	10% - 95%