EDGE-30R+ TCP/IP

Integrated Reader for Multiple Vehicle Identification Solutions

The HID Acura EDGE-30R+ TCP/IP UHF reader is a high-performance, versatile RFID solution designed to meet diverse needs. With two distinct operating modes, the EDGE-30R+ offers unmatched flexibility.

In Autonomous Mode, the reader automatically reads RFID tags, providing a plug-and-play solution that ensures efficient and reliable performance without the need for additional API or SDK integration.

In Transparent Mode, the EDGE-30R+ offers greater flexibility for custom development and system integration, enabling users to create tailored solutions using the provided Mercury API.

With its integrated antenna and reader, the EDGE-30R+ simplifies installation by eliminating the need for separate components. The user-friendly design further enhances convenience by removing the requirement for shielded cables, streamlining setup. Built to withstand harsh environments, the EDGE-30R+ boasts an IP65 rating, ensuring protection against dust and water. It is ideal for both indoor and outdoor applications.

Supporting the IEEE 802.3af Power over Ethernet (PoE) standard, the EDGE-30R+ combines power and data transmission over a single cable, simplifying network integration and enhancing efficiency. For added flexibility, a PoE injector is also available, offering further customization options.

In summary, the EDGE-30R+ TCP/IP UHF Reader is a robust, reliable, and easy-to-use RFID solution that delivers exceptional performance for a wide range of applications.

KEY BENEFITS:

- All-in-one design includes an integrated antenna and reader
- The plug-and-play reader enables automatic reading, ensuring effortless integration and providing a seamless solution
- Two different reader modes: Autonomous Mode for seamless automatic reading, and Transparent Mode for flexible software development and custom programming
- Flexibility for custom development and integration by using available Mercury API
- Compact and robust with an IP65 rating

KEY TECHNOLOGY HIGHLIGHTS:

- RAIN® RFID (UHF)
- 902 – 907 MHz and 915 – 928 MHz (BR)
- 902 – 928 MHz (US)
- Upper Band 916.3 MHz, 917.5 MHz, 918.7 MHz (EU)

TYPICAL APPLICATION AREAS:

- Access control
- Gas station payment
- Truck fleet management
- Train wagon control
- Drive-thru payment
- Fuel pump control

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	EDGE-30R+ TCP/IP Reader
Base Model Numbers	100.707 (EU) 100.706 (US)
	ELECTRONIC
Regulation	(BR) - 902-907 MHz & 915-928 MHz (ANATEL) (US) - 902-928 MHz (FCC) (EU) - 916.3 MHz, 917.5 MHz, 918.7 MHz (CE / RED)
RF Output Power	From 0 to 30 dBm with 0.5 dBm increment
Reading Distance1	Up to 19.7 ft (6 m)
Physical Interface	PoE connector: Ethernet 10/100 Mbps (1.5 kV RMS insulation) PoE (IEEE 802.3af standard) PoE modes supported: • Mode A (mixed DC & data) • Mode B (DC on spares)
Communication Protocols	Ethernet: Data rate: 10/100 Mbps (1.5 kV RMS insulation)
Programming	**Autonomous Mode:** the reader can be configured via TCPIP communication using ASCII commands through a terminal application without the need for an API or SDK. It supports tag read-only functionality. **Transparent Mode:** the reader responds to software using the Mercury API and has tag read and write functionality. (Note: example source code and demo software provided.)
	POWER
Power	IEEE 802.3af Powered Device (PD) Operating PoE Voltage: 37 VDC to 57 VDC PD Power Class: Class 3, 12.95 W
Consumption	Max.15 W. With max. power and high duty cycle
AC Power Cord (PoE Injector)	Europe: Type F	USA: Type B
	PHYSICAL
Dimensions	8.66 × 8.66 x 5.03 in (220 x 220 x 128 mm) with cable plug jacket
Mounting Method	With mounting support on the back side for poles (Ø 1" to 1.75" and 1.75" to 3") or flat surfaces (wall)
Integrated Antenna	Patch circular polarized antenna with 7.5 dBic of gain (RHCP)
Color	White
Weight	45.38 oz (1.4 kg)
	CHEMICAL AND MECHANICAL
Water	IP65 (RJ45 ingress protection cover and cable plug jacket included)
Humidity	95%
	THERMAL
Storage	+14° to 158° F (-10° to 70° C)
Operating	+14° to 149° F (-10° to 65° C)
	INTEGRATED ANTENNA SPECIFICATION
Frequency Range	902 - 928 MHz
Gain	7.0 dBic (min), 7.5 dBic (max.)
VSWR	1.3:1 (max.)
3dB Beamwidth (Elevation)	71° ±1°
3dB Beamwidth (Azimuth)	70° ±3°
Polarization	Circular (RHCP)
Sidelobes Levels @90°	-19 dB (max.)
Front/Back Ratio	-19 db
Axial Ratio @ Boresight	1 db(typ.), 1.3 db (max.)
Axial Ratio @ 20°	2 db (typ.), 3.5 db (max.)
Lightning Protection	DC ground
	OTHER
Standards	ISO 18000-6C (EPC Gen2)
Options	Accessories: interface board
Warranty	1 year

1 The reading distance can vary depending on the tag model, usage mode and environment.

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Countries			Part Number	Description
Albania	France	North Macedonia	100.707	EDGE-30R+ PoE TCP/IP Serial RS-232 UHF Reader Combo (PoE Injector 15 W 48 V)
Austria	Hungary	Norway		
Belgium	Ireland	Portugal	100.703	EDGE-30R+ PoE TCP/IP Serial RS-232 UHF Reader Combo (PoE Injector 15 W 48 V) (Interface Board)
Bulgaria	Iceland	Romania		
Cyprus	Italy	Serbia	**Accessories**	
Czech	Liechtenstein	Slovakia	100.699	Interface Board EDGE-30R+
Republic	Lithuania	Slovenia	100.698	PoE Injector 802.3AF 15 W 48 V
Denmark	Luxembourg	Spain		
Estonia	Latvia	Sweden		
Finland	Malta	Switzerland		
C E	Moldova	United Kingdom		
United States of America (USA)			100.706	EDGE-30R+ PoE TCP/IP Serial RS-232 UHF Reader Combo (PoE Injector 15 W 48 V)
			100.702	EDGE-30R+ PoE TCP/IP Serial RS-232 UHF Reader Combo (PoE Injector 15 W 48 V) (Interface Board)
			Accessories	
FC			100.699	Interface Board EDGE-30R+
			100.697	PoE Injector 802.3AF 15 W 48 V
Brazil*			100.672	EDGE-30R+ PoE TCP/IP UHF Reader
			Accessories	
ANATEL			100.647	Interface Board EDGE-30R+
			100.655	PoE Injector 802.3AF 15 W 48 V

* Other brazilian bundles available, please contact us for more information.

ACURA part of HID

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