

ThingMagic Astra-EX

2-Port Integrated UHF RFID Reader



Astra-EX is an easy to install, unobtrusive, integrated 2-port reader/antenna designed for office and commercial environments. Driven by ThingMagic's powerful M6e UHF RFID Module, Astra-EX's Power-over-Ethernet (PoE) and Wi-Fi options allow for flexible, low cost, single cable installations. Astra-EX blends in well with corporate IT infrastructures and office layouts, and offers full support for ThingMagic's enterprise-class MercuryAPI software.

Ordering Information	
Astra-EX Reader with AC power & Wi-Fi - (North America)	A6-EX-NA-WIFI
Astra-EX Reader POE - (North America)	A6-EX-NA-POE
Astra-EX Reader with AC power & Wi-Fi - (Europe)	A6-EX-EU-WIFI
Astra-EX Reader POE - (Europe)	A6-EX-EU-POE

Tag / Transponder Protocols	
RFID Protocol Support	EPCglobal Gen2 (ISO 18000-6C) with DRM ISO 18000-6B (optional)
UHF RFID Antenna Interface	
Antenna	One integrated 8.5 dBiC antenna, 865 to 960 MHz
Ext. Interface	One RP-TNC connector
RF Power Output	Separate read and write levels, adjustable from 5 dBm to 31.5 dBm* (1.4W) on external port, up to 30.0 dBm (1.0 W) into integrated antenna with +/-0.5 dBm accuracy above +15 dBm
Regulatory Regions	FCC 902-928 MHz (Americas) ETSI 865.6-867.6 MHz (EU) KCC 917-920.8 MHz (Korea) TRAI 865-867 MHz (India) ACMA 920-926 MHz (Australia)

Data/Control/Wireless Interfaces	
Connectors	RJ45 (10/100 Base-T Ethernet) USB Type B (console port) USB Type A (accessory port) HD15 (GPIO interface) 2.5 mm screw-lock barrel (DC power) Female SMA (optional WiFi antenna)
Wireless	Internal 802.11 b/g (optional) WEP 40-bit and 104-bit keys; WPA & WPA2 with TKIP and AES algorithms with pre-shared keys or EAP-TLS
Expansion	USB type A interface permits support for USB client accessories
Indicators, switches, and GPIOs	1 two-color LED status indicator with reset switch; Isolated GPIOs: 4 Inputs & 4 Outputs plus +5 VDC and ground references

Physical	
Dimensions	26.1 cm L x 26.1 cm W x 7.6 cm H (10.2 in L x 10.2 in W x 3.0 in H)
Weight	4.5 lbs (2.0 kg)

Regulatory & Safety	
Regulatory	FCC 47 CFR Ch. 1 Part 15; Industry Canada RSS-21 0 ETSI EN 302 208
Other	ROHS Compliant IEC 60950-1(ed.2) US-17668-UL

Power	
Power Over Ethernet	Power over Ethernet 802.3af in both modes A and B (Supports 100m cable)
External DC Power	10- 30 VDC supply voltage. Maximum DC power: 15 W

Environment	
Operating Temp.	-20°C to +50°C
Storage Temp.	-40°C to +85°C
Humidity	5% to 95% non-condensing

Architecture	
Processor	Intel IXP420 Network Processor
DRAM Memory	64MB
Flash Memory	32MB
Tag Buffer	Memory accommodates 65,000 tags

Performance	
Max Read Rate	Over 400 tags/second
Max Read Distance	Over 30 feet (9 m) with Integrated antenna
Max EPC ID Length	Up to 496 bits

MercuryOS Features	
Networking	Cisco-certified DHCP & DNS-based configuration and firmware management, TCP/IP networking stack
Security	SSL/SSH-based security
Web-Based Control	Configuration and Monitoring from a web browser; HTTP/HTTPS
Protocol Interfaces	LLRP v1.0.1 with multiprotocol extensions
Programming Interface	Java, C, and C# (.NET) APIs on host C-API on reader



*Maximum power may have to be reduced to meet regulatory limits, which specify the combined effect of the module, antenna, cable, and enclosure shielding of the integrated product. Specifications subject to change without notice.