ThingMagic a JADAK Brand

CONSULTING DISTRIBUTOR

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MERCURY 6
4-Port Enterprise UHF RAIN RFID Reader

Driven by ThingMagic's powerful Mercury6e UHF RFID reader module, the Mercury®6 (M6) is a low profile, high-performance 4-port RAIN RFID reader designed for both indoor and outdoor applications. Power over Ethernet (PoE) and WiFi options allow for flexible, low cost installations. With full support for ThingMagic's enterprise-class MercuryOS software, M6 is compatible with both corporate IT infrastructures and sheltered outdoor environments.

Tag/Transponder Protocols

RFID Protocol Support	EPCglobal Gen2 (ISO 18000-6C) with DRM ISO 18000-6B (optional)

UHF RFID Antenna Interface

External Interface	Four RP-TNC connectors
RF Output Power	5 dBm to 31.5 dBm (1.4 W)²
RF Output Power Accuracy	+/- 0.5 dBm above +15 dBm
Frequency Range Per Region	FCC 902-928 MHz (Americas) ETSI 865.6-867.6 MHz (EU) TRAI 865-867 MHz (India) ACMA 920-926 MHz (Australia) KCC 917-920.8 MHz (Korea) IDA 920-925 MHz (Singapore)³ NTC 920-925 MHz (Thailand)³ NCC 922-928 MHz (Taiwan)

Data/Control/Wireless Interfaces

Connectors	RJ45 (10/100 Base-T Ethernet) USB Type B (console port) USB Type A (accessory port) HD15 (GPIO interface) Screw-lock 5.45 mm plug with 2.5 mm center pin (DC input) RP-SMA (Optional WiFi Antenna)
Optional WiFi	Internal 802.11 b/g WEP 40-bit and 104-bit keys; WPA & WPA2 with TKIP and AES algorithms (pre-shared keys or EAP-TLS)
GPIO	4 opto-isolated inputs, 4 opto-isolated outputs, +5V source, ground reference
Indicators/Switches	Two color status LED, reset switch

MercuryOS Features

Networking	Cisco-certified DHCP and DNS-based configuration and firmware management, TCP/IP networking stack.
Security	SSL/SSH-based security
Web-based Control	Configuration, monitoring, and reading from a web browser via HTTP or HTTPS

Application Interface

Direct Communication	EPCglobal Low Level Reader Protocol (LLRP) v 1.1 with multiprotocol and advanced feature extensions
On-Reader API	C API
Host API	Java, C or .NET API

Power

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
Optional AC Adapter	100-240 VDC, 1.5 A RMS max, 47-63 Hz

Physical

Dimensions	19 cm L x 17.8 cm W x 3.4 cm H (7.5 in L x 7.0 in W x 1.3 in H)
Weight	2 lbs (0.9 kg)

Environment

Operating Temp.	-20 C to +50 C
Storage Temp.	-40 C to +85 C
Humidity	5% to 95%, non-condensing
Dust and Water Immunity	IP52
Shock and Vibration	Rated for in-vehicle use per J1455 and IEC60068 tests

Regulatory and Safety

Regulatory	FCC 47 CFR Ch. 1 Part 15; Industrie Canada RSS-21 0 ETSI EN 302 208 v3.1.1 (RED 2014/53/EU)
Other	ROHS Compliant IEC 60950-1(ed.2) US-17669-UL

Architecture

Processor	Intel IXP420 Network Processor
Operating System	Linux kernel version 2.6
DRAM Memory	64 MB
Flash Memory	32 MB

Performance

Max Tag Read Rate	More than 750 tags per second⁴
Max Read Distance	Over 30 feet (9m) with 9 dBiC or 6 dBiL antenna

Ordering Information

Mercury6 Reader with POE	
North America	M6-NA-POE
Europe	M6-EU-POE
India	M6-IN-POE
Australia	M6-AU-POE
Korea	M6-KR-POE
Mercury6 Reader with Integrated WIFI[1]	
North America	M6-NA-WIFI
India	M6-IN-WIFI
Australia	M6-AU-WIFI
AC Indoor Power Adapter	
North America	PWRADP-M6-NA
Europe	PWRADP-M6-EU
Australia	PWRADP-M6-AU

[1]Requires AC Adapter

[2]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.

[3]Certified and available from select ThingMagic resellers.

[4]Measured in controlled test, field results may vary

Specifications subject to change without notice.

MAKING RFID EASY TO USE

ThingMagic is dedicated to driving the barriers to deploying RFID technology as low as possible. We design our products to be easy to use out-of-the box and to deliver predictable, reliable, and repeatable performance. Our development tools require little RFID expertise, enabling you to rapidly design, test, and deploy your RFID solutions.

Mercury API

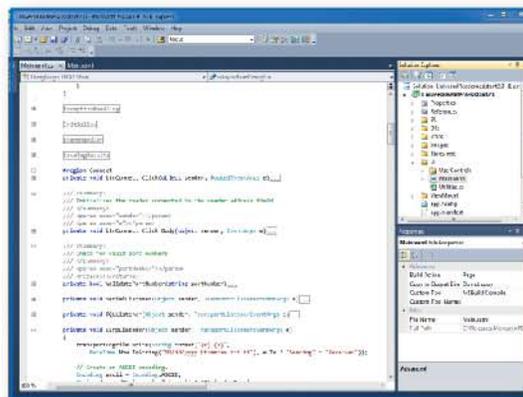A common development platform, supporting an extensive variety of hardware to connect, configure, and control ThingMagic readers.

Universal Reader Assistant

A utility for advanced demo, testing, and tuning of all ThingMagic readers. Reduces complexity for novice users while permitting low-level control for advanced developers.