



Product Family | UHF RFID Reader

Product Code | VUL-USB-IRON-INTANT-ENC-XX* (Iron)
VUL-USB-IRON-II-INTANT-ENC-XX* (Iron II)

**Please see supported regions for specific product code*

IRON

USB Reader Family

The **Vulcan RFID Iron USB Reader** is a small form factor, lightweight, high-performance USB reader. The **Iron** requires an external controller, like a computer.

The case is 3D printed plastic with a metal backplate and rubber base, which allows for durable mounting. The **Vulcan RFID Iron** is compatible with **ThingMagic's application development** tools, including **Universal Reader Assistant**, which allows rapid creation of solutions to support a wide range of applications and integration into existing systems using JADAK ThingMagic's platforms. The **Iron** is also compatible with the **Vulcan RFID UHF Tag Read & Write Software**, which has a **user-friendly interface** that streamlines the encoding process and is designed to eliminate the tedious process of encoding tags by hand.

The Iron platform is now also available as **Iron II**, built on the **ThingMagic M7E-DEKA** RFID module. Iron II adds **HID/Keyboard Wedge** output, so tag reads can be entered directly into applications such as Microsoft Excel without specialized RFID software. **Important:** Iron II is **not compatible** with the Vulcan RFID UHF Tag Read & Write Software referenced above.

The Vulcan RFID Iron USB Reader is great for a variety of applications, including but not limited to:

- Access control
- POS (Point of Sale)
- Embedded Applications
- Tag/Inlay Verification





Specifications

ELECTRICAL		Iron	Iron II
	RFID Module:	ThingMagic M6E	ThingMagic M7E-DEKA
	Operating Frequency:	FCC (917.4 – 927.2 MHz) ETSI (865.6 – 867.6 MHz)	FCC (917.4 – 927.2 MHz) ETSI (865.6 – 867.6 MHz)
	Air Interface Protocol (Autonomous Mode):	EPC Global UHF Class 1 Gen 2 / ISO 18000-6C	EPCglobal Gen 2V2 / ISO 18000-63 ¹
	Transmit Power:	Programmable from 0 dBm to 27 dBm in 0.5 dBm steps	Programmable from 0 dBm to 27 dBm in 0.5 dBm steps
	Max Read Rate:	Up to 150 Tags/Second	Up to 300 Tags/Second
	Max Read Distance:	Testing Recommended	Testing Recommended
	Data Interface:	USB	USB, HID/Keyboard Wedge
	Power Source:	USB Cable	USB Cable
MECHANICAL	Antenna Ports:	None/Integrated Antenna	None/Integrated Antenna
	Dimensions:	72 x 72 x 23 mm (2.83 x 2.83 x 0.91 in)	72 x 72 x 23 mm (2.83 x 2.83 x 0.91 in)
	Weight:	0.08 kg (0.18 lbs)	0.08 kg (0.18 lbs)
ENVIRONMENT	Operating Temperature:	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
	IP Rating:	IP 50	IP 50
APPLICATION INTERFACE	Host API:	Java, C#, C/C++	C, C#/.NET, Java
	Recommended Software:	Vulcan RFID Read, Write, & Verify	Contact Us for a Recommendation

¹ EPCglobal Gen 2V2 (ISO 18000-63) is backward compatible with Gen 2 (ISO 18000-6C).



Product Codes

Region	Iron	Iron II
US	VUL-USB-IRON-INTANT-ENC-US	VUL-USB-IRON-II-INTANT-ENC-US
EU	VUL-USB-IRON-INTANT-ENC-EU	VUL-USB-IRON-II-INTANT-ENC-EU

Regional Frequency Certifications

Regions	FCC:	(917.4 – 927.2 MHz)
	ETSI Upper EU:	(917.4 – 918.7 MHz)
	KCC Korea:	(917.4 – 923.5 MHz)
	MIC Japan:	(917.4 – 923.5 MHz)
	ACMA AU:	(920 – 926 MHz)
	NZ New Zealand:	(922 – 927 MHz)
	SRRC-MII P.R.China:	(920.125 – 924.875 MHz)
	MY Malaysia:	(919 – 923 MHz)
	ID Indonesia:	(923 – 925 MHz)
	PH Philippines:	(918 – 920 MHz)
	TW Taiwan:	(922 – 927.2 MHz)
	MO Macao:	(920 – 925 MHz)
	SG Singapore:	(920 – 925 MHz)
	TH Thailand:	(920 – 925 MHz)
	AR Argentina:	(917.4 – 927.2 MHz)
	BD Bangladesh:	(925 – 927 MHz)

Regional Frequency Certifications

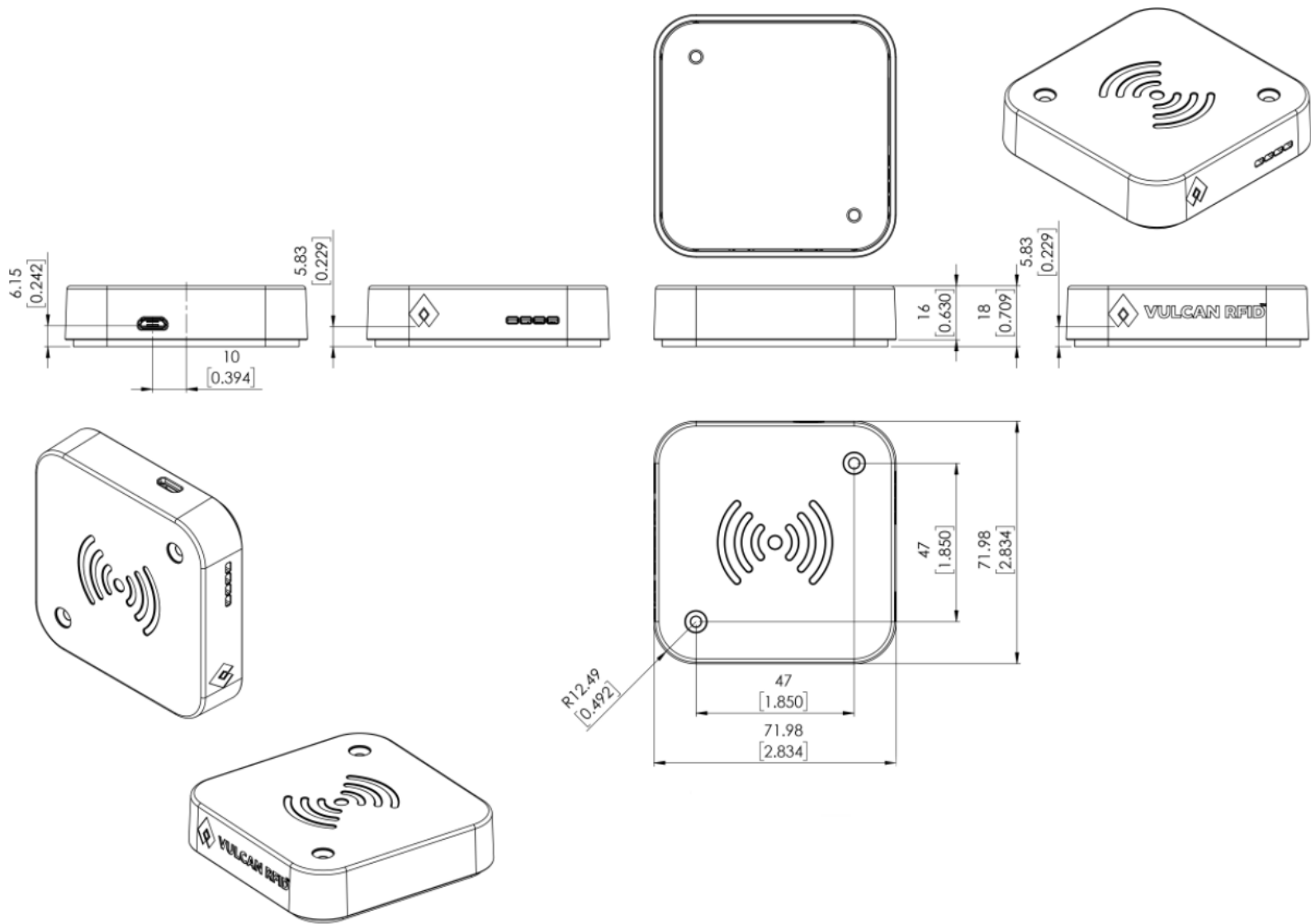
Regions	ETSI EU:	(865.6 – 867.6 MHz)
	TRAI India:	(865.6 – 867 MHz)
	RU Russia:	(866 – 868 MHz)
	VN Vietnam:	(866 – 867.6 MHz)
	HK Hong Kong:	(865.6 – 867.6 MHz)

Both the Iron and Iron II share identical certified operating frequencies for each region variant listed above. Please contact Atlas RFID to confirm the correct product code for your target market.



Diagrams

Units in millimeters and [inches]





Accessories & Compatible Products

Vulcan RFID Power Mapper



VUL-MAPPER

Vulcan RFID Read, Write & Verify



VUL-UHF-READ-WRITE-SOFTWARE

Note: Not compatible with Iron II

RFID Tag Sample Pack



RFID-TSP



About Vulcan RFID Products

Vulcan RFID offers a broad range of innovative RFID readers, antennas, custom RFID tags, and accessories suited for a wide variety of industries and applications. Designed to deliver superior accuracy and reliability, Vulcan RFID products offer exceptional flexibility and performance. Vulcan RFID delivers an extensive product portfolio that includes both UHF and NFC products that support a large variety of market solutions. Manufactured to withstand environments ranging from mild to extreme, Vulcan RFID products enable end-users to reach and sustain high levels of performance in the UHF or NFC frequency bands.



Vulcan RFID Readers

Vulcan RFID offers high-performance RFID readers that are easy to install, configure, and integrate.

[Shop Now](#)


Vulcan RFID Antennas

Vulcan RFID offers an extensive collection of UHF RFID antennas designed to maximize the RF performance and coverage area of an RFID system.

[Shop Now](#)


Vulcan RFID Tags & Inlays

Vulcan RFID offers a broad range of RFID labels, tags and inlays built to withstand environments ranging from mild to extreme.

[Shop Now](#)


Vulcan RFID Accessories

Vulcan RFID provides a variety of high-quality accessories, RF hardware, and cables.

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