Sargas
2-PORT UHF RFID READER

ThingMagic
A DIVISION OF TRIMBLE

The ThingMagic® Sargas reader is a high-performance, 2-antenna-port, UHF reader in a low profile enclosure. Built around the ThingMagic Micro reader module, the device reads more than 750 tags per second at distances over 9 meters (30 feet) when configured with appropriate antennas. With an onboard processor, memory and removable flash storage, the reader has features designed for enterprise

EASY SYSTEMS INTEGRATION

ThingMagic Sargas reader makes system integration easier in 3 ways:

- ▶ Hardware features
- ▶ Sargas reader architecture
- ▶ Supporting software tools & API

Careful use of these capabilities can reduce hardware count and software development time in a project.

Hardware Features

The reader has extensive hardware input/ouput features. In addition to Ethernet, 2 USB (one host,one client), and 4 opto-isolated General Purpose Input/Output (GPIO) ports the Sargas reader has a unique HDMI port. Integrating a display into an RFID system often involves adding a separate PC to take advantage of standard peripherals or adding a custom display. With an HDMI port built into the reader, a standard display or monitor can be directly attached reducing hardware count and development time.

Sargas Reader Architecture

The Sargas reader architecture is based on a 1 GHz ARM Cortex A8 processor running Linux kernel version 3.8. This is supported by 512 MBytes of DDR memory and 4 GBytes of FLASH memory. Onboard applications are supported via the Mercury OS C API.

MercuryOS additions include web-based configuration & monitoring using HTTP/HTTPS and SSL/SSH-based security. Reader networking features include a TCP/IP stack plus Cisco-certified DHCP & DNS-based configuration and firmware management.

Development Tools

The Sargas reader is based on the powerful ThingMagic Micro module, and supports the Mercury API. This API is common across all ThingMagic reader modules and finished readers. Code that is developed for one system may be reused in other designs and projects.
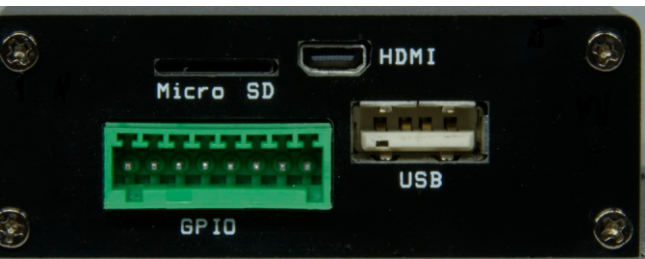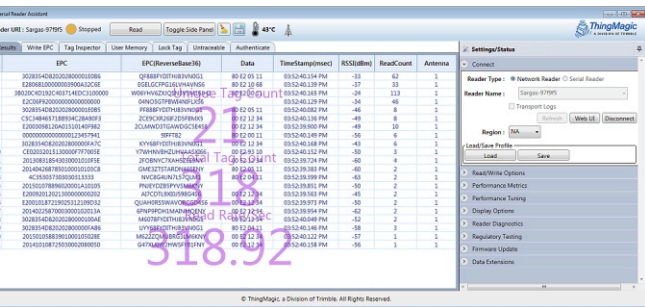
Key Features

- ▶ Reads up to 750 tag per second
- ▶ World-wide frequency coverage
- ▶ Networking, GPIO, USB, micro SD ports
- ▶ Unique on-board HDMI interface
- ▶ Mercury API, Universal Reader Assistant software support
- ▶ Independent read and write RF controls

RoHS Compliant   USB   RAIN RFID

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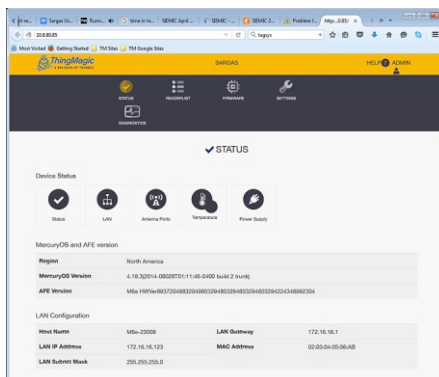
Sargas 2-PORT, UHF RFID READER

For a sales inquiry or quote
SAVE TYPING
- use the
QR code

Physical & Environmental

Dimensions	87 mm L x 80 mm W x 23.8 mm H
	0.27 Kg (0.6 lbs)
Operating temperature	-20 to +60ºC (-4 to +140ºF)
Storage temperature	-40 to +85ºC (-40 to +185ºF)

RF Interface

Antenna Ports	2 ports with RP-SMA connectors
RF Power output	0 dBm to 30 dBm (1 W), ±1.0 dBm
RF Power control	Command-adjustable with separate read and write levels
Default RF Power Output	+30 dBm ±1.0 dBm
Frequency	Pre-configured for these regions: ▶ FCC/IC 902-928 MHz, 917.4-927 MHz, 917.5-922.5 MHz (Americas) ▶ ETSI 865.6-867.6 MHz,869.85 MHz (EU) ▶ TRAI 865-867 MHz (India) ▶ KCC 917-920.8 MHz (Korea) ▶ ACMA 920-926 MHz ▶ SRRC-MII 920-925 MHz (P.R. China) ▶ MIC 916.7-920.9 MHZ (Japan) ▶ Open (Customizable) 865-869 MHZ, 902-928 MHz

RFID Parameters

Protocols	EPC Gen 2V2 ISO 18000-63
	ISO 18000-6B, IPx, AEI ATA *
	EPC Global LLRP V1.1
Tag read rate	> 750 tags per sec. (settings dependent)
Tag read distance	> 9 m (30 ft) with appropriate antenna

* These protocols require additional licenses

Miscellaneous

Power	4.5 to 5.5 V dc, 15 W max
Regulatory	FCC/IC, CE Mark
Safety	IEC 60950-1 (ed. 2), US-17650-UL

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