

### RADIO FREQUENCY IDENTIFICATION SYSTEMS

# Series 6000 Access Control Vicinity Readers S6400

#### Description

Texas Instruments' RFID line of 13.56 MHz readers provides a new level of performance, speed and accuracy for the access control market. A superior read range and faster data transfer rate make the TI-RFid<sup>TM</sup> Systems' S6400 family Access Control Reader System ideal for any building or venue where it's vital to ensure safe, fast and secure access.

The S6400 family is based on ISO/IEC 15693 vicinity card standards, which means interoperability across all systems, 2000-bit memory read capacity and multiple badge identification. Up to 10 badges can be read simultaneously by a single reader, creating faster throughput and eliminating read interference, common when two or more conventional proximity cards are in the same read field.

#### Key Features:

- Universal Wiegand Support
- Open Standard
- RS-485 Support
- Read/Write Capability
- ISO/IEC 15693 Compliance
- Simultaneous, Multi-Card Reading
- Superior Read Range

Available in either a wall plate or mullion option, the two-piece reader package is easy to install in new or retrofit applications, and its attractive design fits any setting.

TI's 13.56 MHz 2000-bit memory and in-the-field programmability means users can add and update vital information like time stamps or employee authorization codes, certification or emergency medical histories.



S6410 Wall Plate Reader (left) and S6420 Mullion Reader (right)

# Specifications:

Device name	S6410 Wall Plate Reader		S6420 Mullion Reader		
Part number	RI-H4R-S6H3	RI-H4R-S6H4	RI-H4R-S5H3	RI-H4R-S5H4	
Color	Charcoal Gray	Black	Charcoal Gray	Black	
Operating Frequency	13.56 MHz				
Supported Standards	ISO/IEC 15693 (Vicinity)				
Supply Voltage	+9 to +14 V <sub>DC</sub> , built-in overvoltage and reverse polarity protection, Linear power supply recommended				
Average Current	50 mA Typical (normal) , 130 mA Typical (Badge Read)				
RS-485 Baud Rates	9600, 19200, 38400 (Default)				
Supported Protocols	Wiegand 26-64 bit and RS-485 protocol				
Data Integrity	500 ft (152 m) Wiegand, 4000 ft (1219 m) RS-485 (AWG22 wire)				
Data Output Format	DES Encryption Mode (Cipher Text), Wiegand UID Mode, RS-485 Mode				
Read Range	Up to 8" (~20 cm)		Up to 5" (~13 cm)		
Mount on Metal*	No*		Yes*		
Operating Temperature	-20°C to +70°C				
Storage Temperature	-40°C to +75°C				
Operating Humidity	Up to 90% Relative non-condensing				
Protection Class	IP64, Potted				
Regulatory Approvals	FCC, CE, UL-94 and UL-294 (ETL), MPT (Japan)				
Overall Dimensions	5.0" x 5.0" x 1.0" (12.7 x 12.7 x 2.5 cm)		5.0" x 1.7" x 1.0" (12.7 x 4.3 x 2.5 cm)		
Weight (Includes Packaging)	~10.5 oz (~298 g)		~6.3 oz (~178 g)		

<sup>\*</sup> The S6420 (Mullion) reader has been optimized so that it can be mounted onto a metal surface with only a minor diminishment in read range. The S6410 (Wall Plate) reader should not be mounted on metal, as read range will diminish significantly.

## Wiring Guide:

Color	Wiegand	RS-485	Function
Black	Essential	Essential	Ground (GND)
Red	Essential	Essential	Power (+9 to +14 V <sub>DC</sub> )
Gray	N/A	Essential	RS-485(A or -)
Violet	N/A	Essential	RS-485(B or +)
Green	Essential	N/A	Wiegand Data(0)
White	Essential	N/A	Wiegand Data(1)
Brown	Optional	Optional	Red LED
Orange	Optional	Optional	Green LED
Yellow	Optional	Optional	Audio
Blue	Optional	Optional	Hold

For more information, contact the sales office or distributor nearest you. This contact information, and the most up-to-date specifications for this data sheet can be found on our web site at: http://www.ti-rfid.com

Texas Instruments reserves the right to change its products and services at any time without notice. TI provides customer assistance in various technical areas, but does not have full access to data concerning the uses and applications of customers products. Therefore, TI assumes no responsibility for customer product design or for infringement of patents and/or the rights of third parties, which may result from assistance provided by TI.

