### **Spectrum EX-JB-SCS-ISTAR**



Class I/II, Division 1 - UL Listed Industrial Control Panel with Contactless Badge Reader







#### **Description**

Spectrum EX-JB-SCS-ISTAR is a UL listed industrial control panel, hazardous-area certified for Class I/II, Division 1, groups B,C,D, E, F, G, T5. The industrial control panel is a powerful, IP edge access control device that provides a strong feature set to secure any door. Spectrum EX-JB-SCS-ISTAR increases overall system reliability by providing localized decision making at each door. The controller has a robust local cardholder database of over 400,000 personnel records and local alarm and event buffering in the event communication to the host is unavailable. It is also designed to withstand shock, vibrations and temperatures from -20°C to +40°C (-4°F to +104°F), making it perfect for high demanding installations.

#### **Features**

- Certified Class I/II, Division 1 Groups B, C, D, E, F, G
- Operating Temperature range: -20°C to +40°C (-4°F to +104°F)
- Controls and powers all access control devices at the door to minimize installation costs.
- Powerful iStar feature set including anti-pass back and advanced peer-to-peer clustering
- Localized access control decision-making with storage for over 400,000 personnel records.
- Local LCD and LED's provide clear startup
- AES 256 network encryption; FIPS 197 listed
- Compatible with C·CURE 9000 and C·CURE 800/8000
- Dedicated input for fire alarm interlock releases door locks durign fire conditions
- Contactless smart card reader

## Specifications

	Explosion-proof Junction Box		
General			
Dimensions	254 x 101.6 x 152.4 mm ( 10 x 14 x 6 in. )		
Weight	11 kg ( 25 lbs )		
Material	Aluminum		
Operating Conditions	-20°C to +40°C ( -4°F to +104°F)		
UL Listed File Number	E481600		
Electrical			
Input	100-240VAC/VDC, 10A, 50/60 Hz		
Output	12-30 VDC , 3 A MAX		
System Memory			
Memory	64 MB RAM, 128 MB flash EEPROM		
Cardholder capacity			
One clearance, one card/ person, 10-digit cards	400,000		
Ten clearances, one card/ person, 10-digit cards	230,000		
One clearance, five cards/ person, 10-digit cards	130,000		
Ten clearances, five cards/ person, 40-digit cards	85,000		
Note - Memory allocation is	dynamic and shared between card holders, event storage, and configuration information		
Network Communicatio	ns		
Ethernet Ports	One, 10/100Base-T		
Network Encryption	AES 256-bit, FIPS 197		
Readers			
Number of readers supported	One, two, or four		
Types of readers supported	Wiegand and RM (RM only for 3 and 4)		
Reader Technologies Supported	Multi-Technology, Proximity, Smart Card (incl. PIV II & TWIC), Wiegand and Magnetic Stripe (RM only		
Maximum Distance to Door	RM: 1,219 m (4,000 ft); Wiegand: 150 m (500 ft)		
Reader Power Available	12 VDC, 1.5 A total (including aux power and RM port power)		
RM Bus Communications	Three ports, RS-485 half duplex, two wire, plus optional two wires for device power (One-reader model does not have RS-485 ports)		
Regulatory			
Access & Burglar	UL 294, UL 1076, ULC/ORD C1076, CSA C22.2 No. 205		
Fire	UL 2043 (for use in plenum air handling spaces)		
Safety	EN 60950, IEC 60950 (2- or 4-reader only)		
EMI/EMC	FCC Part 15 Class A (Class B with shielded Ethernet cable), EN 55022, EN 55024, EN 50130-4, AS/NZS CISPR 22, ICES-003		
Physical	EN 50130-5, EN 50133-1		
Encryption	FIPS 197		
Environmental	RoHS		
International	CE, cULus, C-Tick		
Explosion-proof Certifications	cULus E481600 UL 1203 UL 508A Class I/II Division 1 Groups B,C,D, E, F, G		

# Specifications

Explosion-proof badge reader		
General		
Housing Dimensions	171 x 171 x 76 mm(6 % x 6 % x 3 in.)	
Model Name	R40	
Base Part Number	920N	
Typical Range	13.56 MHz Single Technology ID-1 Cards – SIO Data Model	
	iCLASS Seos: 3.2" (8 cm) iCLASS: 5.2" (13 cm) MIFARE Classic: 3.9" (10 cm) MIFARE DESFire EV1/EV2 3.2" (8 cm)	
	13.56 MHz Single Technology Tags/Fobs – SIO data Model	
	iCLASS: 2.8" (7 cm) MIFARE Classic: 2.0" (5 cm)	
Keypad	No	
Operating voltage Range	5 - 16 VDC	
Current Draw - Standard Power Mode² (mA)	65 @ 16V	
Current Draw - Intelligent Power Management (IPM) Mode² (mA)	40 @ 16V	
Peak Current Draw - Standard Power or IPM Mode² (mA)	200 @ 16V	
NSC³ Power Consumption - Standard Power Mode	1.0 @ 16V	
NSC³ Power Consumption - w/ IPM	0.6 @ 16V	
Operating Temperature	-35°C to +65°C (-31°F to +150°F)	
Storage Temperature	-55°C to +85°C (-67°F to +185°F)	
Operating Humidity	5% to 95% relative humidity non-condensing	
Transmit Frequency	13.56 MHz	
13.56 MHz Card Compatibility	Secure Identity Object™ (SIO) on iCLASS Seos, iCLASS SE/SR, MIFARE DESFire EV1 and MIFARE Classic (On by Default)  - MIFARE Classic and MIFARE DESFire EV1 custom data models  - standard iCLASS Access Control Application (order with Standard interpreter)  - ISO14443A (MIFARE) CSN, ISO14443B CSN, ISO15693 CSN  - FeliCa™4 CSN, CEPAS4 CSN or CAN  - MIFARE DESFire EV2 via EV1 backward compatibility	
Communications	Wiegand, Clock-and-Data, Open Supervised Device Protocol (OSPD) via RS485	
Panel Connection	Pigtail or Terminal Strip	
Reader Management	HID Reader Manager Mobile App for HID Mobile Access / OSDP infield upgrade, configuration, firmware upgrade and diagnostics	
Certifications	UL294/cUL (US), FCC Certification (US), IC (Canada), CE (EU), RCM (Australia, New Zealand), SRRC (China), KCC (Korea), NCC (Taiwan), iDA (Singapore), RoHS, MIC (Japan)4	
Cryto Processor Hardware Common Criteria Rating	EAL5+	
Patents	www.hidglobal.com/patents	
UL Ref Number	R40E	



#### **Approvals**





8935 ALMEDA GENOA RD. HOUSTON, TEXAS 77075

FILE:E481600

SPECIALIZING IN EXPLOSION PROOF TECHNOLOGY

ENCLOSURE FOR USE IN HAZRD LOCATIONS.
AS TO EXPLOSION AND FIRE HAZARD ONLY.

EX-JB-SCS-ISTAR

MODEL: EX-JB-SCS-ISTAR

CLASS I II, DIVISION 1 GROUP B,C,D,E,F,G T5 Tamb -20°C TO +40°C, Type 4 SSCR:N/A

Input Voltage: 130-240VAC/VDC, 10A, 50/60 Hz

Output Voltage: 12-30 VDC, 3 A MAX WARNING: THIS ENCLOSURE HAS BEEN MANUFACTURED FOR THE INSTALLATION OF SUPPLY CONNECTIONS (CONDUITS) AND UL LISTED OFSET YPE AUXILIARY POLYCES:

TO PREVENT IGNOTION OF HAZARDOUS ATMOSPHEES. ALL NONLISED COVER OPENINGS MUST BE CLOSED WITH THE BRATED LASS, GROUPS B, CLD, EG, AND TYPE AY RIGIOUSE FOOR THEY ARTHORS) PULSOS AND CONDUIT. CLOSE UP PLUGS MUST BE RATED FOR THE SAME HAZARDOUS LOCATION CLASSES AND GROUPS ARE MARKED ON THE ENCLOSES CHAMPILATE. EXERT PASSEMBLY TIGHTRY CLOSED WHEN IN OPERATION SPECTRUM CAMERA SOLUTIONS, HOUSTON, TEXAS

