

# UR-184 / 185 / 186

## Integrated Multi Channel RFID Reader / Writer



SG-UR-184



SG-UR-185



SG-UR-186

Sygole SG-UR-184/185/186 multi channel readers are ultra-high frequency RFID reader/writer devices with integrated antennas. They have the characteristics of fast identification speed, high accuracy. Their operating frequency is 860MHz to 960MHz in line with EPC Global Class 1 Gen 2 / ISO18000-6C. The maximum output power is 27dBm, supporting multiple communication method such as RS-485 and Ethernet PoE. The housing is made of sturdy aluminum.

### Features

- Compatible with EPC Global Class I Gen 2 18000-6C).
- Supporting China, North America, European standards
- Support RS—485, Ethernet (POE) and other communication interfaces
- Integrated reader and antenna plus external antenna connectors
- IP67 protection grade for harsh industrial environments

### Performance

- Excellent anti collision algorithm. High speed reading more than 400Tags/sec.
- Multi TAGs identification.
- 4 Channel polling for multi antenna installation
- Robust and compact structure in aluminum
- Low-power circuit design with good heat dissipation



### Applications

Sygole SG—UR—184/ 185/ 186 single channel readers are suitable for multi-point distribution and can be easily connected to control systems such as PLC and PC, etc. By identifying the RFID tags mounted on the product or the tray, product information is transmitted to the control system, and the production information issued by the control system can also be written into the RFID tags to realise production process management such as mixed flow production, production cycle control, and assembly process control.

# SG-UR184 / 185 / 186 Specifications

		Technical Data		
Physical Characteristics		SG-UR-184	SG-UR-185	SG-UR-186
Specifications	Wireless Protocol	EPC Global GEN2 / ISO18000-6C	EPC Global GEN2 / ISO18000-6C	EPC Global GEN2 / ISO18000-6C
	Working Frequency	860 - 960MHz	860 - 960MHz	860 - 960MHz
	Output Power	5 - 27dBm	5 - 27dBm	5 - 30dBm
	Power Step	1dBm	1dBm	1dBm
	Receive Sensitivity	< -83dBm	< -83dBm	< -86dBm
	Read/Write Distance	0-5 Meters	0-5 Meters	0-12 Meters
	Multi TAG Identification	> 400/sec	> 400/sec	> 400/sec
	TAG Buffer	1000Tags	1000Tags	1000Tags
	RSSI	Supported	Supported	Supported
	Antenna Protection	Supported	Supported	Supported
	Communication Interface	RS485 / Ethernet PoE	RS232 / Bluetooth	RS485 / Ethernet PoE
	Serial Communication Speed Rate	460.8Kbit/sec	115.2Kbit/sec	460.8Kbit/sec
	Ethernet Communication Speed Rate	10/100TP	1M	10/100TP
	Power Supply Voltage	24Vdc / 48PoE	24Vdc	24Vdc / 48PoE
	Average Current	0.4A @ 24Vdc	0.4A @ 24Vdc	0.2A @ 24Vdc
GPIO	2 Input / 2 Output	2 Input / 2 Output	2 Input / 2 Output	
Indicator	6 LED Status Indicator	6 LED Status Indicator	6 LED Status Indicator	
Physical Parameters	Dimension	90*95*40mm	150*150*42mm	246*246*63mm
	Weight	1Kg	1.5Kg	2.5Kg
	Fixed Tyoe	4 x M5 Screws	4 x M5 Screws	4 x M6 Screws
	Housing Material	Die Casting Aluminium Alloy	Die Casting Aluminium Alloy	Die Casting Aluminium Alloy
	Shell Color	Blue + Black	Blue + Black	Blue + Black
Enviroments	Operating Temperature	-40°C +65°C	-40°C +65°C	-40°C +65°C
	Storage Temperature	-40°C +85°C	-40°C +85°C	-40°C +85°C
	Working Humidity	5/95% non condensing	5/95% non condensing	5/95% non condensing
	IP Protection Grade	IP67	IP67	IP67
	Drop	GB/T2423-8-1995 (IEC-60028-2-31)	GB/T2423-8-1995 (IEC-60028-2-31)	GB/T2423-8-1995 (IEC-60028-2-31)
		GB/T2423-10-2008 (IEC-60028-2-6)	GB/T2423-10-2008 (IEC-60028-2-6)	GB/T2423-10-2008 (IEC-60028-2-6)
	Certifications	CE - FCC	CE - FCC	CE - FCC
Order Code		SG-UR-184-RS485 SG-UR-184-POE	SG-UR-185-RS232 SG-UR-186-BT	SG-UR-186-RS485 SG-UR-186-POE



SG-UR-184  
SG-UR-185



SG-UR-186

The information in this document is subject to change without notice and should not be construed as a commitment by TechSigno srl. All reasonable precautions have been taken, TechSigno srl assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective compagnie.

SG-UR-181-82-83



TechSigno srl is an independent company that build RFID system and intelligent objects for multimedia, industrial, transportation, medical, and wireless applications. Working closely with our customers, we meet the specific made-to-order demands of our customer to achieve maximum functionality, efficiency, reliability and therefore satisfaction.

**TechSigno SRL**  
Via dei Boschi, 2/13 - 33040 Pradamano (UD) - ITALY  
T +39 0432 603604 F +39 0432 602905 [info@techsigno.com](mailto:info@techsigno.com) [www.techsigno.com](http://www.techsigno.com)



Guangdong Sygole Intelligent Technology Co.,Ltd. is a leading manufacturer of industrial identification products and solutions. After decades of accumulation of identification sensing technology and product innovation, Sygole has been widely recognised in the industry and became the core supplier and trusted partner of many companies. Sygole can provide you reliable identification products and solutions in areas of machining, equipment, asset, assembly, transportation, sorting, carrying, logistics, etc.