

RS250 Series Stick Reader ISO Compatible Model RS250-3-45S/Model RS250-3-45C



General Description

The Allflex Model RS250 Series Stick Reader is an extremely rugged hand-held passive transponder reading device that is compatible with the technical specifications of ISO Standards, 11784 and 11785, including both FDX-B and HDX technologies. The Stick Reader provides the basic RF/ID reader functions of reading, storing, and transmitting via RS232 serial data the identification code contained within passive transponder for real time and batch mode data logging. The user interface consists of (1) large thumb-actuated Read button, (2) a Red "Exciter Active" visual indicator, and (3) an audible beeper and Green "Good Read" visual indicator.



Construction

The Allflex RS250 Series Stick Reader is assembled in a rugged fiberglass tube enclosure that is designed to be easily held and operated with either hand and is convenient to position in the vicinity of the transponder being scanned. The scanning antenna coil is internally mounted in the forward end of the tube and is oriented for optimal read distance with ear tag transponders when the axis of the transponder is coaxial to the axis of the enclosure tube.

Performance Capabilities

The Allflex Stick Reader is capable of reading the Allflex 30mm HDX/HP ear tag transponder at a minimum distance of 27cm (10.63") (optimum orientation) when powered from 6VDC with a read error rate no greater than $1 \text{ in } 10^6$. FDX-B ear tag transponders can be read at nominal distance of 20cm (7.87"). The built in memory of the Allflex RS250 Series Stick Reader also stores 3,000+ transponder codes and can be downloaded by sending a command via Hyper Terminal or an equivalent program.

Ordering Information

SKU

Allflex Model RS250-3-45S
Allflex Model RS250-3-45C

Description

45cm Length with straight cable
45cm Length with coiled cable

Accessories

| | |
|-----------------------------|-----------------------------------|
| 580004-001 | 120V AC Power Supply |
| Allflex Model PW250 | Rechargeable Battery Pack |
| Allflex Model RFL100/RFI200 | RF Link Base Unit and Mobile Unit |

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RS250 Series Stick Reader ISO Compatible

Model RS250-3-45S / Model RS250-3-45C

SPECIFICATIONS

GENERAL

| | |
|-------------------------------------|--|
| RFID Compatibility: | ISO 11784 & 11785 HDX and FDX-B |
| Form Factor: | Portable Handheld Fiberglass Rod Enclosure w/Rubber Handle Grip |
| User Interface: | Single "Press to Read" Activation Button, Red LED "Exciter Active" Visual Indicator, Audible Beeper and Green LED "Good Read" Visual Indicator, RS232 Serial Data Port, Software upgradeable via RS232 serial port |
| RS232 Serial Port: | 1200 BPS to 57.6 KBPS (9600,N,8,1 default setting) |
| Serial Data ID Code Format | Decimal or Hexadecimal Mfr/Country Code + National ID Code |
| Memory: | Stores 3,000+ transponder codes in non-volatile memory for download |
| User Options: | Non-volatile mode control options selectable via RS232 serial port interface |
| Power/Data Interface: | 1 meter coiled cable (extends to 3 meters) or 5 meter straight cable w/DB9(f) connector & 2.5mm x 5.5 coaxial power jack |
| Battery Power: | 6 to 12 VDC External Battery or Mains Powered Supply |
| Agency Certifications: (PENDING) | Electromagnetic Compatibility – FCC Part 15 Class A, and CISPR 22 (EN55022), and EN50082-1 Product |

PHYSICAL/ENVIRONMENTAL

| | |
|-----------------------|---|
| Dimensions: | 45cm L x 32mm diameter (18" L x 1.25" diameter) |
| Weight: | 0.62kg. (22 ounces) |
| Material: | UL94V0 Fiberglass and ABS UL94 HB Plastic |
| Color: | Black/Gray |
| Operating Temperature | -10°C to +55°C (IEC68.2.1/.2) |
| Storage Temperature | -40°C to +85°C (IEC68.2.1/.2) |
| Humidity: | 0 to 95% (IEC68.2.56) |
| Altitude: | -100 to +3,000 meters |
| Mechanical Shock: | Per IEC 68-2-27 (15g/11mS saw tooth) & 1 meter free drop into concrete) |
| Vibration: | Per IEC 68-2-6 (10-55 Hz sinusoidal/0.75mm displ./1 oct/min./10 cycles) |
| Hermeticity: | IP-67 (dust-tight/immersible) per IEC 529 |

RELIABILITY

| | |
|----------------|-----------------------------------|
| MTBF: | 50,000 hours |
| MTTR: | 0.5 hours (not field serviceable) |
| Expected Life: | 5 years, minimum |

PERFORMANCE

| | |
|--|--|
| Read Distance: (@ 6 VDC) (add 5 cm for 12VDC) | 27cm (10.63") (minimum – Allflex 30mm HDX/HP ear tag) 20cm (7.87") (minimum – Allflex 31mm FDX-B ear tag) |
| Reading Orientation: | 0° to 45° with less than 10% range decrease |
| Read Zone: | 360° in radial and axial planes with respect to end of reader enclosure |
| Interrogation Rate: | ~ 9 times/second |
| Read Error Rate: | Less than 1 in 10 ⁶ |
| Exciter Signal Radiated Field Strength: | 81 dBuV/m @ 10 meters with 6VDC power input 87 dBuV/m @ 10 meters with 12VDC power input |

