Intelleflex I-Beam™ 500 Reader

Intelleflex Corporation offers break-through performance with its best in class, standards-compliant RFID readers

The Intelleflex I-Beam™ 500 reader provides industry-leading range and read/write reliability for applications such as asset tracking, yard management, and nested supply chain. It can read EPC-compliant passive tags, as well as next-generation battery-assisted passive tags. The I-Beam 500 is based on Intelleflex's 3.2.1MultiProtocol™ capability which enables customers to future-proof their infrastructure by allowing interoperability with a wide variety of RFID tags.

The I-Beam 500's advanced design ensures exceptionally high read/write accuracy. It performs reliably in real world environments around liquids, metals, and other RF-unfriendly conditions, ensuring accurate readability of fully-loaded pallets and containers. The reader's proprietary software eliminates missed tag reads and its high sensitivity allows up to 50 meter read range. The I-Beam 500's flexible network connectivity and discovery enable easy integration into existing networks. The I-Beam 500's multi-session support allows multiple applications to share control over a single reader, eliminating the need for additional layers of network administration. In addition, it provides middleware complete flexibility to virtualize reader-to-application mapping.

The I-Beam 500's robust design withstands conditions in harsh environments such as warehouse and industrial areas. It can be configured with up to four antenna pairs and interfaces to the network using Ethernet and 802.11. The I-Beam 500 meets EPCglobal™ standards for Class 1 Gen 2 (C1G2) and is forward compatible to Class 2 and 3 tags.

The I-Beam 500 can read EPC-compliant passive C1G2 tags and next-generation battery-assisted Class 3 tags

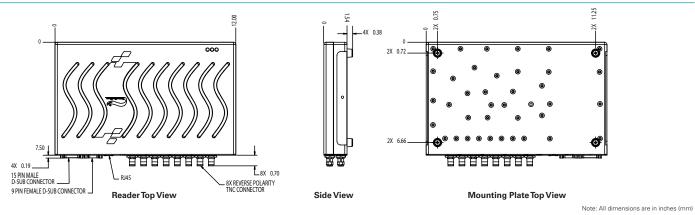| FEATURES	BENEFITS
Advanced Design	
• High sensitivity receiver	• Up to 50 m read range
• Adaptive signal processing and noise reduction	• Exceptional read/write reliability in real world environments
• Efficient scouring algorithms in TagHunter software	• Enables more efficient tag search and access
• Multiple session support	• Supports multiple protocols (XML, LLRP, .NET and SLRRP) on different interface ports
Standards Compliance	
• Class 3 operation	
• Backward compatible to EPCglobal C1G2 standards	• Global interoperability
Built-In Application-specific Security	• Allows selected access to tag memory (protects data integrity)
Network Capability	
• Native web capability	• Real-time asset visibility from any place in the world
• Ethernet, 802.11	• Remote reader management
	• Easy integration into existing network
• GPIO ports	• Integrates external sensors and peripherals for intelligent control of assets (e.g. light stacks, PLCs)

intelleflex™

SPECIFICATIONS

Physical Characteristics
Dimensions	7.5″ x 12″ x 2.6″ (includes mounting plate with four ¼″ mounting holes)
Weight	3.6 lbs
Visual Status Indicators	LEDs for power (green), activity (yellow) and software on (red)

Connectivity
Network	10/100 BaseT Ethernet RJ45
External Interfaces	Control I/O Port (4 input, 4 output ports) DB15
	RS-232 Serial DB9
RF Connectors	Reverse-TNC
Antenna Ports	4 transmit ports, 4 receive ports
Power Supply	+24 VDC @ 1.5 amps

Environmental
Temperature	IEC 60068-2-1/2/14
Operational	-4° to +131°F / -0° to +55°C
Storage	-4° to +158°F /-20° to +70°C
Humidity	IEC 60068-30/78 5-95% non-condensing
Vibration	IEC 60068-2-6

Compliance
Safety	EMI/RF Emissions
Regulatory	FCC Part 15C

Hardware/OS And F/W Management
Operating System	Linux (Version 2.4.2.1)
Firmware Upgrade	Web-based and remote firmware upgrade capabilities
Frequency	UHF band, 902-928 MHz US
Method	Frequency Hopping Spread Spectrum (FHSS)
Power Output	4W EIRP max
Tag Protocol	EPC C1G2 (Read, Write), Class 3 (Read, Write)
IP Addressing	Static and dynamic
Host Interface Protocols	XML, LLRP, .NET and SLRRP

Intelleflex reserves the right to change product information and specifications without notice.

ORDERING INFORMATION

Part Number	Description
IB500.US	I-Beam 500 RFID reader; United States 902-928 MHz frequency band
IB500.KR	I-Beam 500 RFID reader; Korea 910-914 MHz frequency band
IB500.IN	I-Beam 500 RFID reader; India 865-867 MHz frequency band

DIMENSIONS

Reader Top View   **Side View**   **Mounting Plate Top View**

Note: All dimensions are in inches (mm)