

Intelleflex RFID Development Kit

Intelleflex Corporation offers break-through performance with best in class, standards-based RFID readers and tags



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The Intelleflex Development Kit offers users the opportunity to evaluate Intelleflex's FMR-5000 reader and four types of battery-assisted passive tags which provide industry leading read range and read/write reliability. Use it to develop RFID in the lab or in real world conditions for high value applications such as asset tracking, yard management, people tracking and nested supply chain.

The Intelleflex single-chip tags provide exceptionally high read/write accuracy. The STT-7000 general purpose tags are rugged, compact tags designed for a wide variety of applications, indoors and outdoors. The SMT-7100 tags are the first tags that offer long range with on-edge performance. They are especially designed for reliable performance around metals, liquids and other challenging environments. The BAT-7300 badge tag offers outstanding performance in a thin profile. It can be used for personnel tracking but may also be used for other applications such as asset tracking. The FBT-7400 fob tag is a highly compact tag designed for loop attachment to key rings and other items with similar style mounting requirements. Intelleflex tags have up to 50 meter read range and their proprietary wake-up circuit lengthens battery life with persistent data storage.

The Intelleflex FMR-5000 multi-protocol reader provides extended capabilities with its advanced design ensuring exceptionally high read/write accuracy. The reader's multi-user/multi-tasking software allows multiple applications to seamlessly share control over a single reader. Together, the Intelleflex tags and FMR-5000 reader perform reliably in real world environments around liquids, metals, and in RF-unfriendly conditions to ensure accurate readability.

The kit includes one FMR-5000 reader, five STT-7000 tags, five SMT-7100 tags, five BAT-7300 badge tags, five FBT-7400 fob tags and two pairs of antennas. The Intelleflex RFID Development Kit also includes a Software Development Kit (SDK) with example code, detailed API documents, User Manual, Quick Reference Guide and Installation Guide. The Development Kit also includes Intelleflex product training.

Components

Item	Quantity
Intelleflex FMR-5000 reader	1
Intelleflex STT-7000 tags	5
Intelleflex SMT-7100 tags	5
Intelleflex BAT-7300 tags	5
Intelleflex FBT-7400 tags	5
Antennas and cables	2 pairs
Assorted cables and connectors	
SDK Document Set	

INTELLEFLEX TAG SPECIFICATIONS

Device Type	Class 3 RFID (battery-assisted passive) single chip transponder
Protocol	Class 3
Modulation	Amplitude modulated forward link (reader to tag) Frequency modulated reverse link (tag to reader)
Range	Up to 50 meters (150+ ft) (depending on tag antenna)
Battery Life	Up to 5 years, based on duty cycle
Data Rates	8 Kb/sec forward link 8 or 32 Kb/sec reverse link
Data Retention	10 years at 85°C
Operating Temperature	-4° to +140°F (-20° to +60°C)
Memory Size	64 Kb total, 60 Kb rewritable non-volatile user memory
Other Features	"Disable" command Password-controlled read, write and permalock on 1 Kb block of memory

FMR-5000 READER SPECIFICATIONS

Protocol	Class 3 and Class 1 Gen 2 (C1G2)
Radiated Power Output	US: 4 W (EIRP); Europe and India: 2 W (ERP)
Number of Channels	US: 50; Korea: 16; Europe and India: 4
Connectivity	<ul style="list-style-type: none"> Network External Interfaces RF Connectors Antenna Ports Power Supply
	<ul style="list-style-type: none"> 10/100 BaseT Ethernet RJ45 GPIO Port (4 input, 4 output ports) DB15 RS232 Serial DB9 Reverse-TNC 4 transmit ports, 4 receive ports +24V DC @ 1.5 amps
Host Interface Protocol	XML
Embedded Java Application Hosting	Java 1.4 CDC Foundation Subset
Dimensions	7.5" x 12" x 2.6" (19,1 cm x 30 cm x 6,6 cm) [includes mounting plate with four 1/4" (6,5 mm) mounting holes]
Weight	6.1 lbs (2,8 kg)
Visual Status Indicators	LEDs for power (green), activity (yellow) and software on (red)
EMC	FCC Part 15 Class B, EN55022 Class B, EN55024, CISPR 22 Class B
Agency Listings	UL 60950, cUL C22.2 No. 60950-00, TUV EN60950, CE
RoHS Compliant	Restriction of Hazardous Materials Compliance

ANTENNA SPECIFICATIONS

Type	Circularly polarized patch antenna Separate transmit and receive antennas
Connectors	Reverse-TNC
Dimensions	12" x 12" x 1" (305 mm x 305 mm x 25 mm)
Weight	2.64 lbs (1,2 kg)
Gain	6.85 dBil / 9 dBic (no cable loss assumed)
VSWR	1.5:1 (max)

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

ORDERING INFORMATION

Part Number	Description
DVK-1000	RFID Development Kit; North America 902-928 MHz frequency band
DVK-1100-KR	RFID Development Kit; Korea 910-914 MHz frequency band
DVK-1200-IN	RFID Development Kit; India 865-867 MHz frequency band
DVK-1500-EU	RFID Development Kit; Europe 865.6-867.6 MHz frequency band

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