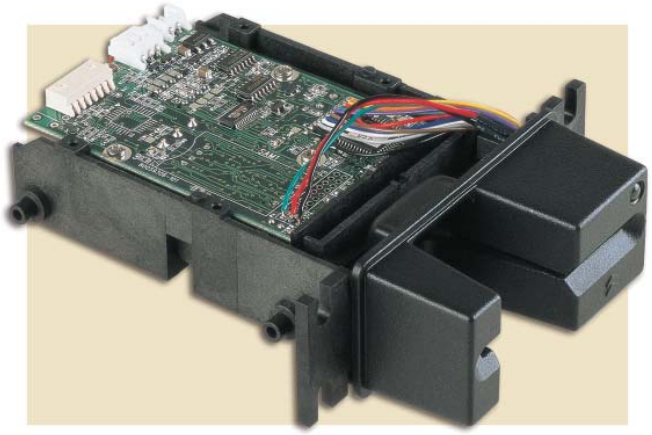
SPECTRUM II™

HYBRID INSERT READER

Intelligent OEM Module

for Magnetic Stripes and/or Smart Cards
RS-232, USB, and PC/SC Interface

USB
EMV™
CE



Reads magnetic stripes.

ID TECH's Spectrum Hybrid Insert Reader is designed to read and decode up to three tracks of magnetically-encoded information. It reliably reads media conforming to ISO 7810 and 7811 standards. An optional tri-color LED guides the user through the reading process and signals successful and unsuccessful reads.

Reads smart cards.

The ID TECH Hybrid Insert Reader can also be configured to read and write to Integrated Circuit Cards (ICC or "smart" cards), memory or microprocessor cards conforming to ISO 7816 standards. The reader itself is approved to the Terminal Level 1 EMV 2000 specification, and is able to communicate with a host PC as a smart card reader-writer under the PC/SC version 1.0 interface. Programming the USB version is accomplished with a USB Serial Driver that enables serial data to be input via a USB port on the host computer.

Selects and formats data.

The ID TECH Hybrid Insert Reader is a fully-intelligent unit that can be configured to read all tracks or only selected tracks from a magnetic stripe. It can also output data with a terminating character and up to nine prefix and postfix characters to match a data format expected by the host. In addition, the reader offers gate, latch, and Security Access Module (SAM) options.

Compatible with a wide range of footprints and applications.

The reader's chassis is molded from a glass and lubricant-filled engineering plastic that supports the magnetic head as well as a PCB with a landing-style smart card connector. A separate molded bezel (choice of standard, metal, or flush mount) attachs to the chassis to guide the card and serve as mount for the LED indicator. The magnetic head is spring-loaded to ensure good contact with warped or bowed cards. The smart card connector has gold-plated contacts that create a .02 inch "wiping" action to ensure dependable connection and long life.

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Spectrum™ II Intelligent Hybrid Insert Reader Specifications

Electrical

RS-232:	+5 VDC/70mA* (power adapter regulated 5 VDC/500mA or equivalent).
USB:	+5 VDC/70mA power supplied by the host computer.
Operating Current:	70 mA maximum for three tracks of magnetic data.
Chassis Ground:	Connected to GND and magnetic head case.

*Without latch or smart card options.

Environmental

Operating Temperature:	32° F to 131° F (0° C to 55° C).
Storage Temperature:	-40° F to 158° F (-40° C to 70° C).
Humidity:	Maximum 95% non-condensing.

Reliability

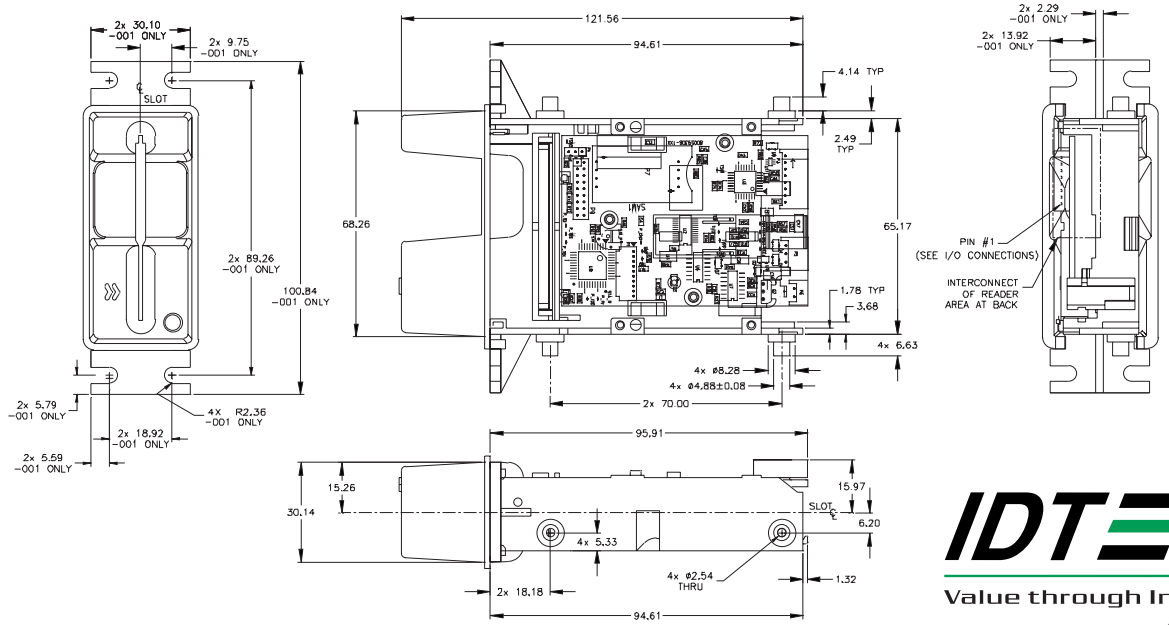
Magnetic Head Life:	1,000,000 cycles minimum.*
IC Card Connector:	1,000,000 cycles minimum.* Contacts are gold-plated and exceed EMV life requirements for minimum resistance over the life of the reader.
Chassis and Bezel:	2,000,000 card cycles minimum.*
Magnetic Read Rate:	Less than one error in 100,000 bits on cards conforming to ISO 7811-1/6 (not induced by operator error).**
Warranty:	One year, parts and labor.

*All wear reliability numbers are based on operation in a laboratory environment.
**Based upon reading on withdrawal.

Mechanical

Magnetic Stripe Formats:	ISO 7811, F2F. Media with magnetic coercivity of 300 through 4,000 Oersted can be read.
Reading Speed:	3 to 50 inches per second.
Media Thickness:	.025 to .035 inches. Maximum card thickness .035 inches.
Dimensions:	Length: 4.64 inches (117 mm). Width: 3.97 inches (101 mm). Height: .389 inches (9.88 mm).*
Options:	Latch, Gate, Security Access Module (SAM) sockets, LED Indicator, “Card Seated” Signal (optional for magnetic stripe, standard for ICC), “Card Present” Signal. (Reader life will be less than 1,000,000 cycles with “Card Present” option.)
Insert Reader Footprint:	

*Without multiple SAM sockets.



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