

Senitron Active Antenna Reader



Model: SA-2000

Reader Overview (Impinj R2000 Chip)

Air Interface Protocol	EPCglobal UHF Class 1 Gen 2 / ISO 18000-63 (formerly 18000-6C) DSB, SSB, and PR-ASK transmit modulation modes Dense reader mode (DRM) ISO 18000-6B, Ipico, and iP-X version 1.07 not supported by Indy reference design
Transmit Output Power	Configurable up to 17 dBm. External power amplifier supported for high performance applications
Transmit Gain	Adjustable to > 25 dB
Modem	Configurable digital baseband
Operating Frequencies	860 – 960 MHz
Package	64-pin 9 mm x 9 mm x 0.85 mm sawn QFN
Power	Low power consumption, 1100 to 880 mW configuration dependent; 200µW standby
Process	0.18 µm SiGe BiCMOS
RSSI	Tag dependent, configurable bandwidth
RX Sensitivity	-110 dBm; -93 dBm (DRM); -84dBm (DRM) with +10dBm self-jammer
Supported Regions	All worldwide regions supported, including: US, Canada, and other regions following US FCC 47 CFG Ch. 1 Part 15 Europe and other regions following ETSI EN 302 208-1 (V1.4.1)

Figure 1-1. Indy R2000 System Block Diagram

