

# Operational Description

FCC ID: SYAICR04

This wireless reader handles most functions in an intuitive manner so that the same button that turns on the reader also links the wireless Bluetooth™ connection and activates the antenna to read, display, and store or transmit all tags. The EUT is an ISO reader; it reads all RFID tags, which are in compliance with the animal ISO 11784- 11785 protocol. The I.D.ology ISO-Cane Reader is a Class 1 unit that has a transmission link range of 330 feet. Even more important is that the ISO-Cane links automatically when power is applied and it can be deployed either as a point-to-point or a point-to-multipoint solution. The 134 kHz RFID reader is on CW for 60 mS and off for 20 mSec.

The Antennas are inside the EUT and are permanently installed inside the EUT.

## Specifications

RFID Reader Operating Frequency	134.2 kHz
RFID Tag Protocol	ISO 11784 & ISO 11785 Compliant tags
RFID RF Power Output	0.4 Watts
Bluetooth Transmission Carrier Frequency	2.4 to 2.4835 Giga Hertz hopping Bluetooth™ frequency
Bluetooth Modulation Method	GFSK, 1Mbps, 0.5BT Gaussian
Bluetooth Transmission Power	Class 1 (max 20dBm) SPP compatible
Bluetooth Hopping	1600 hops/sec, 1MHz channel
Bluetooth Receiving Signal Range	-84 to -20dBm
Bluetooth Receiving IF Frequency	1.5 MHz center frequency
Physical Characteristics	Length 16"-43" depending on options Width 3.5" Height 9" Weight 2 lbs to 3 lbs depending on options
Environmental Characteristics	Operating Temperature -10° to 75° C (+14° to +165° F) LCD Display stops functioning at 0° C but reader and link still work. Storage Temperature -20° to 75° C (-4° to +165° F) Relative Humidity 5% to 95% (non-condensing) Rain & Dust Resistance IP-64 compliant Drop Spec. Withstands 4' drop 15 times onto concrete
Power	Battery Type Ni Metal Hydride 7.5v, (5 x 2000 mAh cells) Battery Life 12 to 18 hours, application dependant Recharging Time: 4 hours