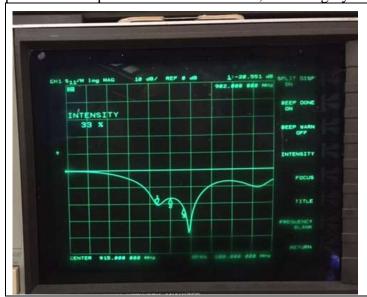


## 15 December 2017

## Preliminary Data AA1-B "All-in-One" Antenna with Proximity Sensor

The AA1-B is an upgrade of the AA-1, incorporating an advanced Wireless and Wired Router along with local program control of the reader, and a proximity sensor.

The antenna for the AA1-B is the same design shipped with the AA-1. It is manufactured using printed techniques on a stable dielectric, and is highly consistent in performance.



Version (AA1-B)

Antenna Return Loss (s11)

**Test Condition:** 

Connected to Network Analyzer,

Facing Down

**RESULT: PASS** 

Requirement: RL > 10dB, 902-

928MHz

Comment – properly centered.

ELECTRICAL SPEC	
Frequency Range	902-928-MHz
Bandwidth	26 MHz
Gain	9 dB
Beam width	H: 60° E: 60°
F/B ratio	≥ 15-dB
VSWR	≤ 1.5
Polarization	LHCP (Left Hand Circular Polarization)
Nominal Impedance	50 Ω
Reader Design Impinj R2000 based	33 dBm max output
Tag Read Rate	> 150 Tags/second
Typical Range (Read Mode)	Up to 5 meters; covers 100 ft <sup>2</sup> from 9-15-foot
	ceiling
Size	22 cm x 18 cm (24 cm diagonal); 5.5 cm max
	thickness
Weight	0.52 kg (1.14 lb)



## AA1-B with READER, PoE Module, and Proximity Sensor



AA-1B Active Antenna – Front Showing the center located Proximity Sensor.



AA-1B Active Antenna – Back Showing RJ-45 connector for Power over Ethernet (PoE) and Ethernet connection.