

2.1033 (b) (7) Equipment Photographs

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Photo 1

Internal

RF Transmitter - Component Side

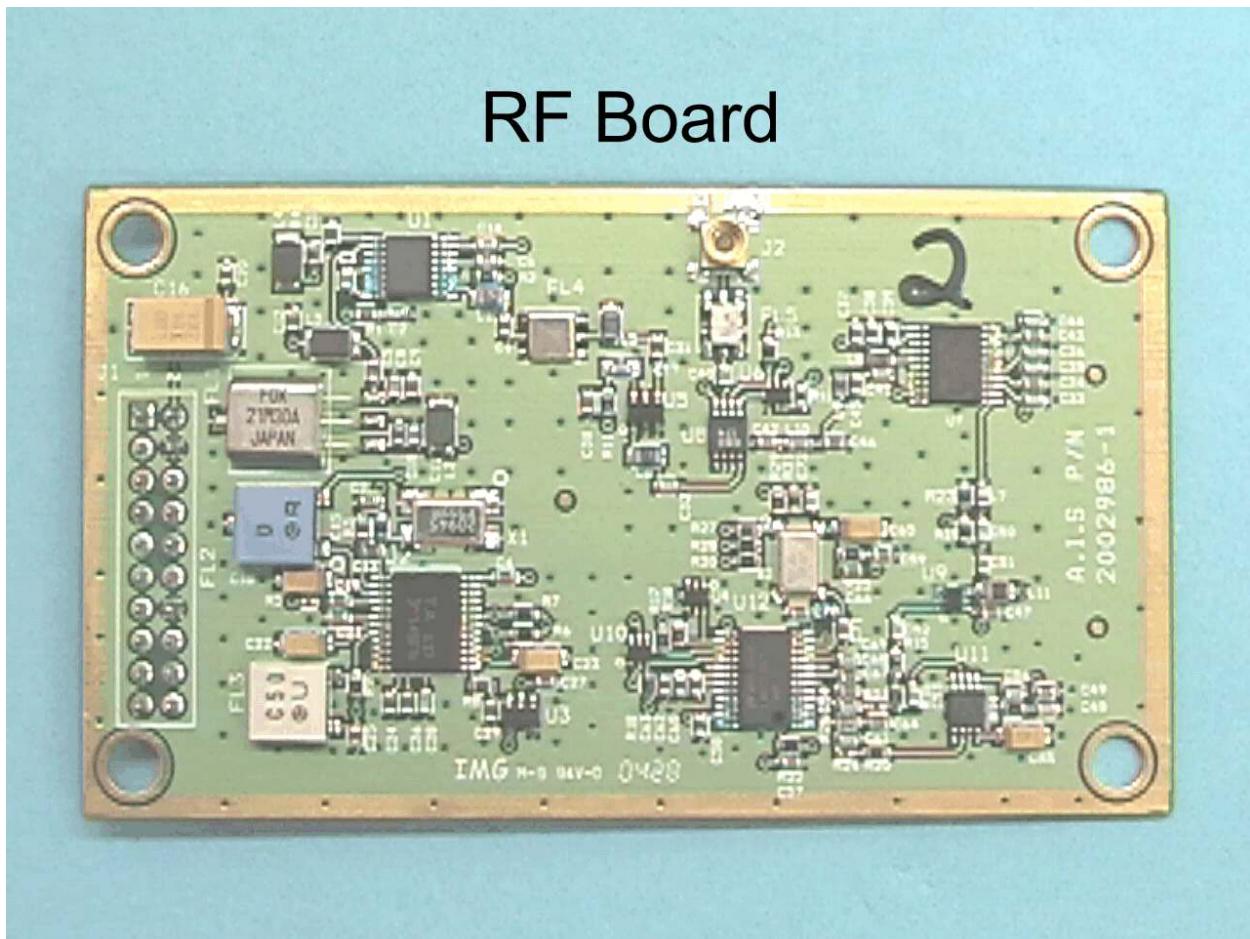


Photo 2

Internal

RF Transmitter - Solder Side

RF Board - Back

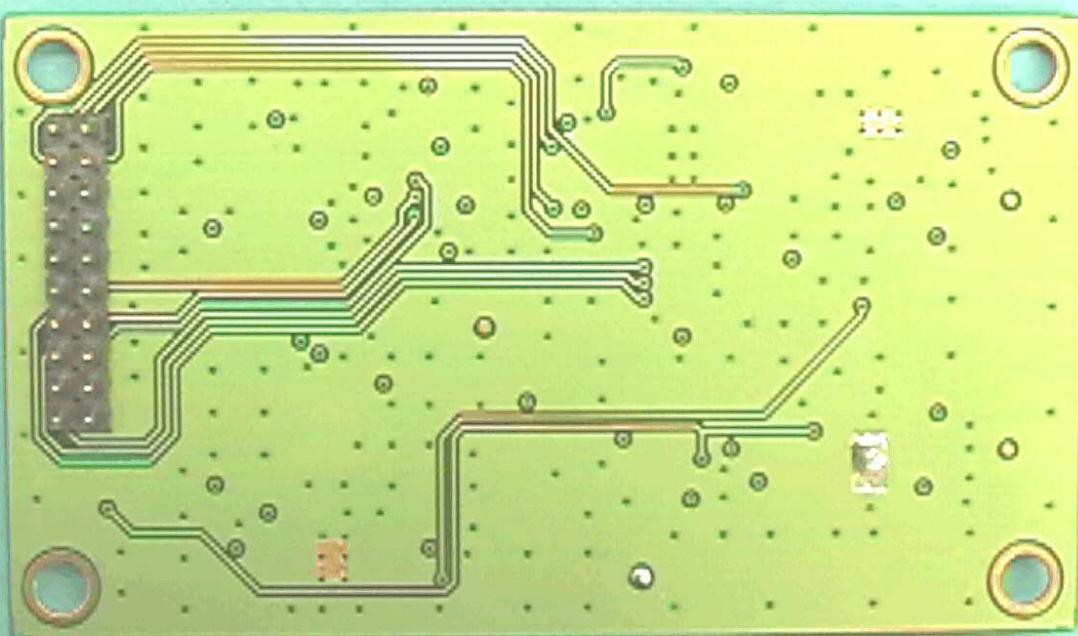


Photo 3

Internal

RF Transmitter - with shield mounted - view one

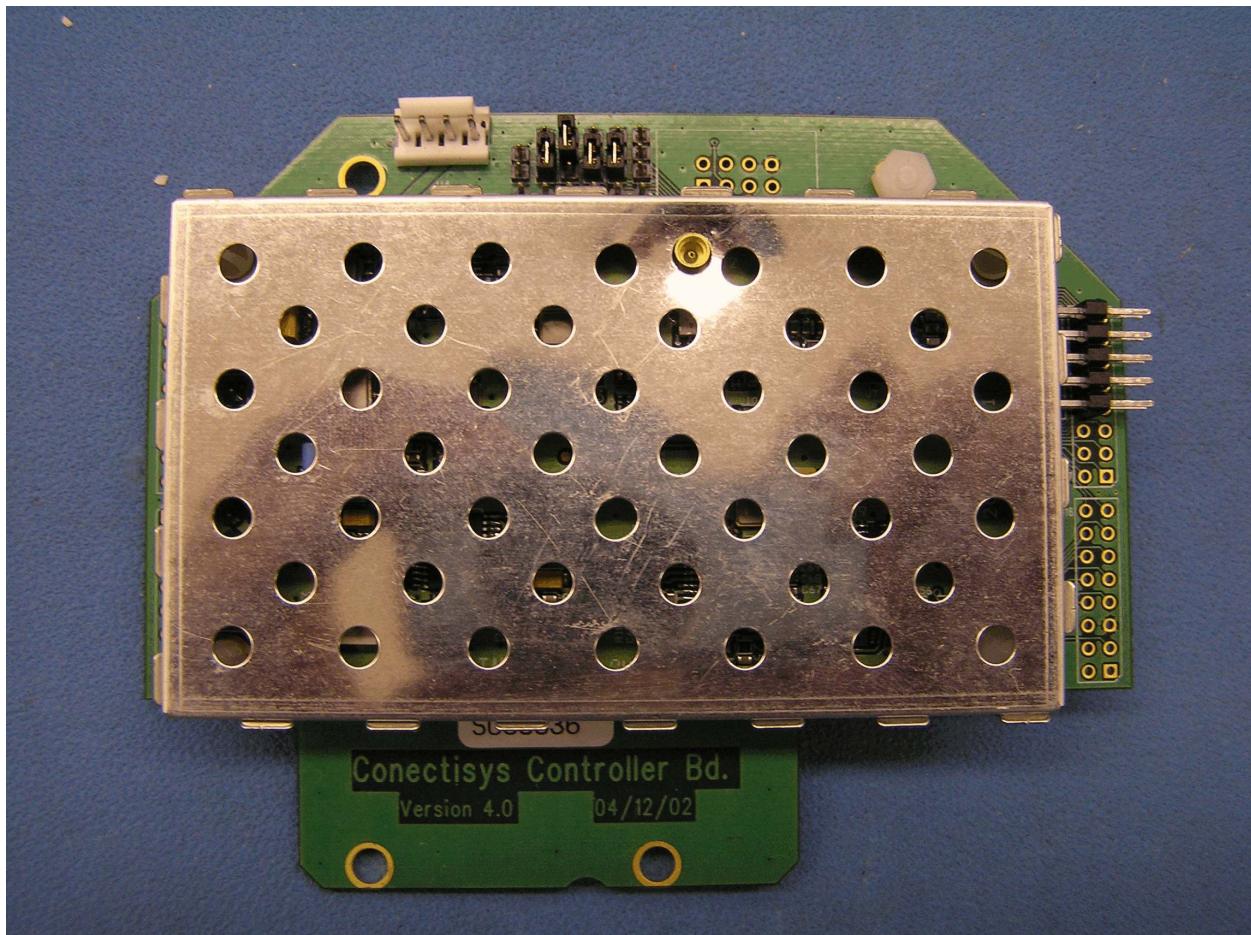


Photo 4

Internal

RF Transmitter - with shield mounted - view two

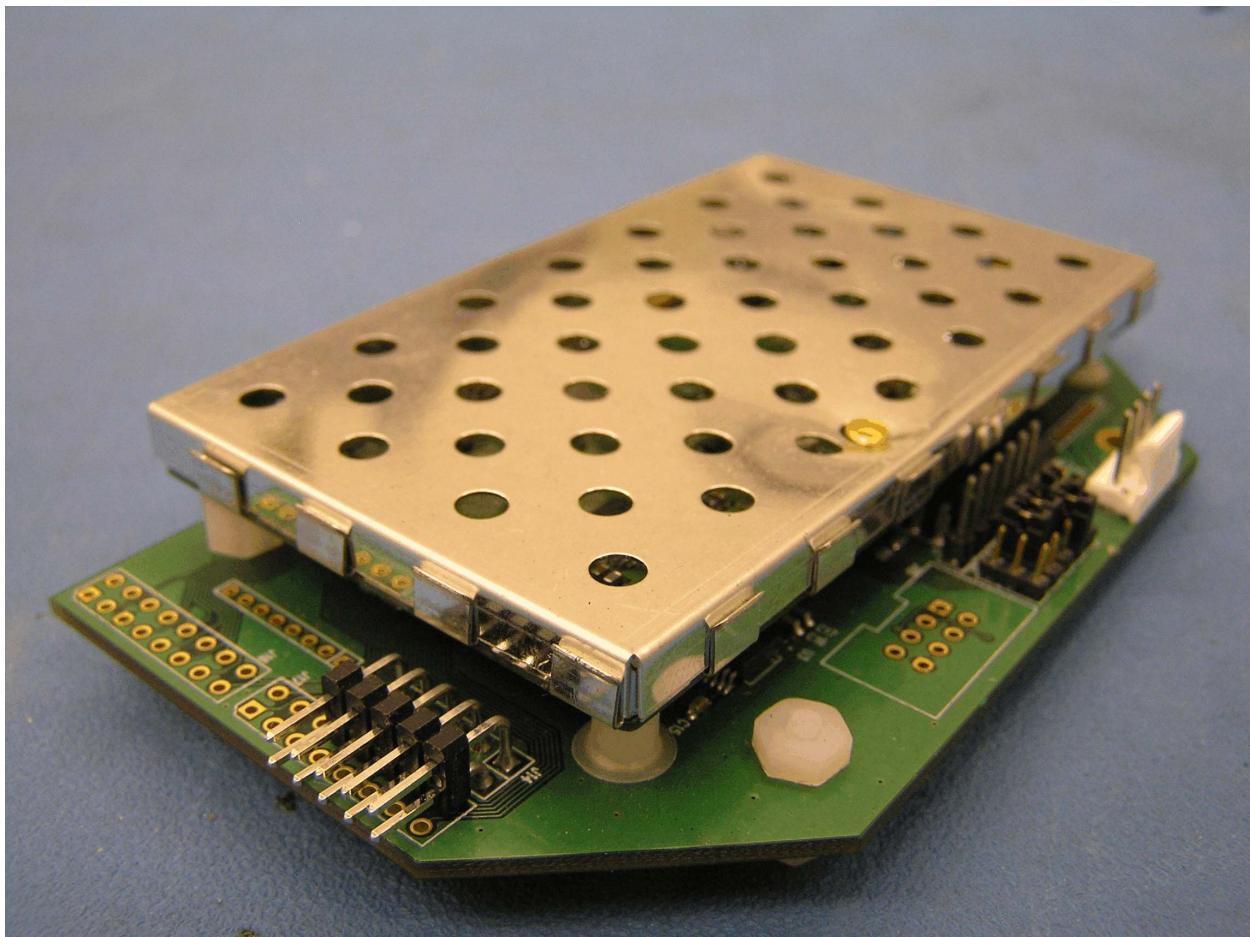


Photo 5

Internal

Controller board - component side

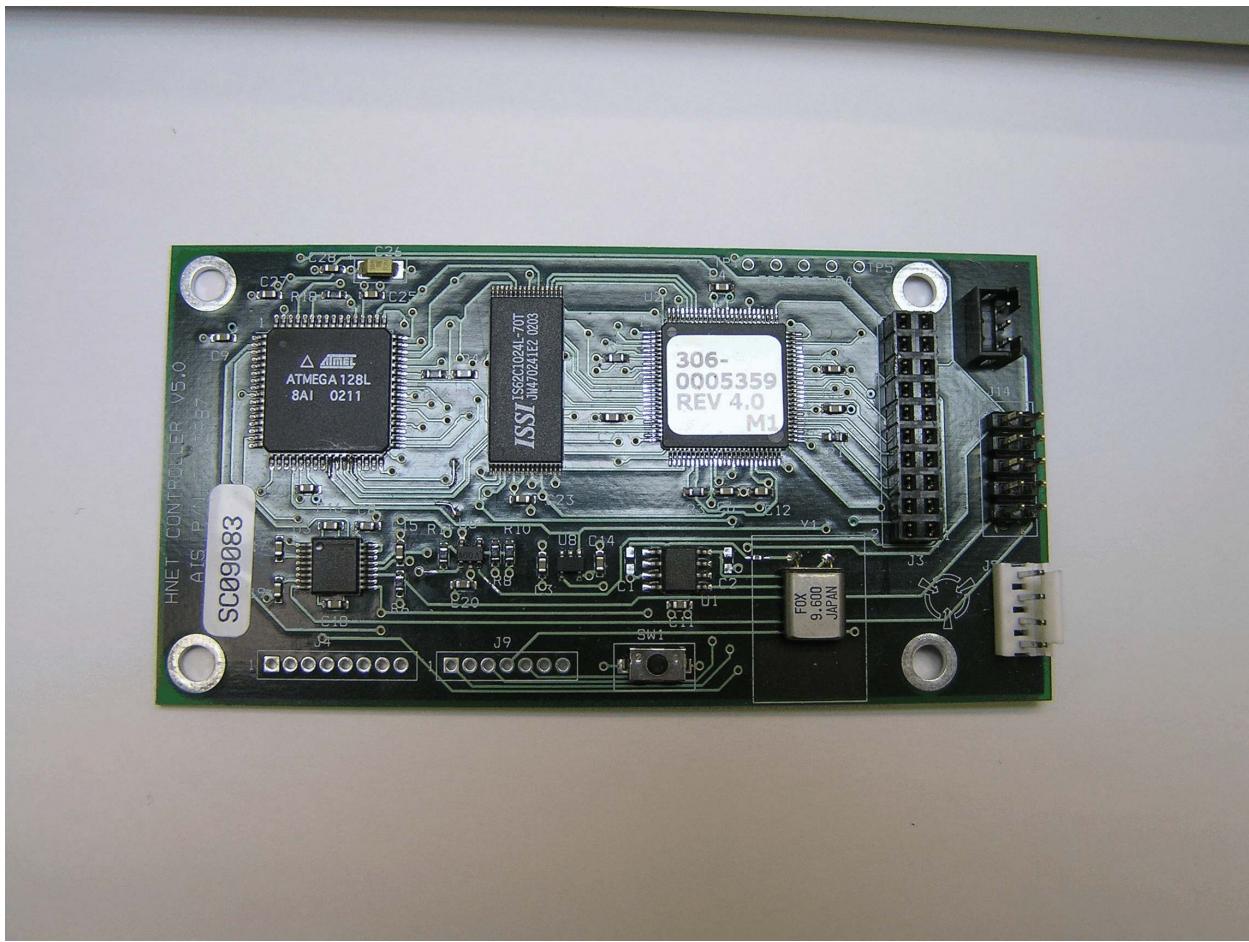


Photo 6

Internal

Controller board - circuit side

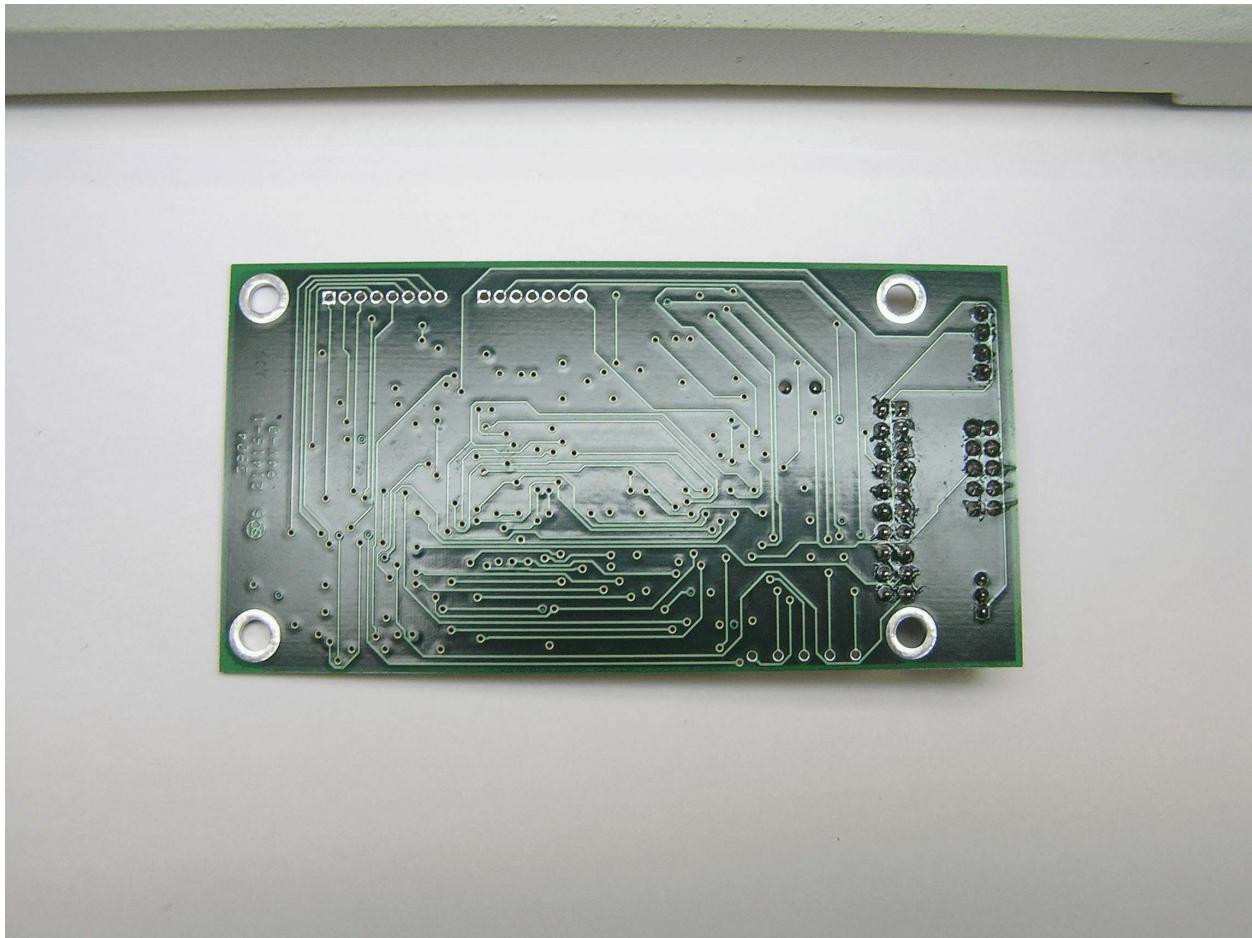


Photo 7

Internal

Label Placement - Inside door



Photo 8

Internal

Label Close Up

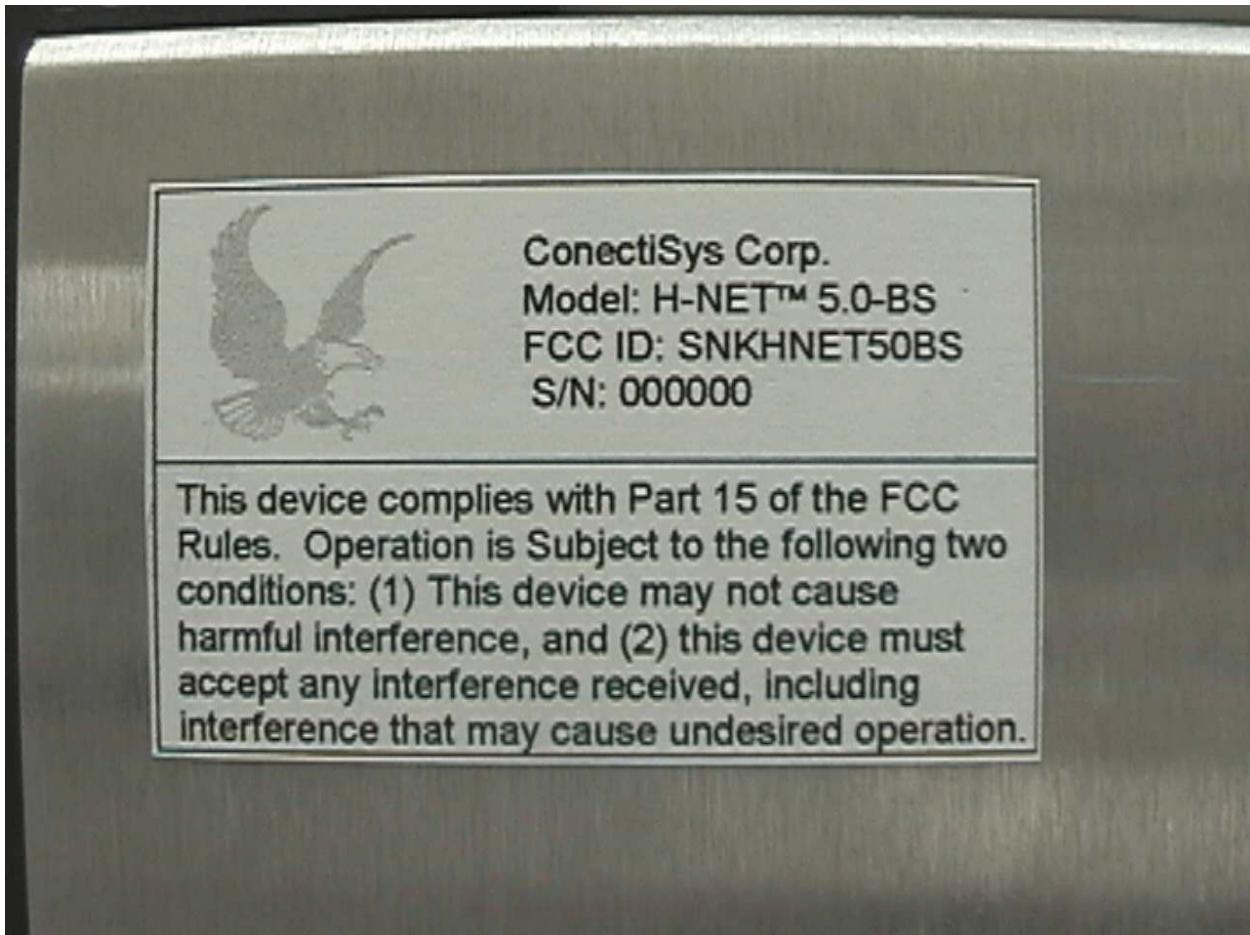


Photo 9 Internal Unit with door open

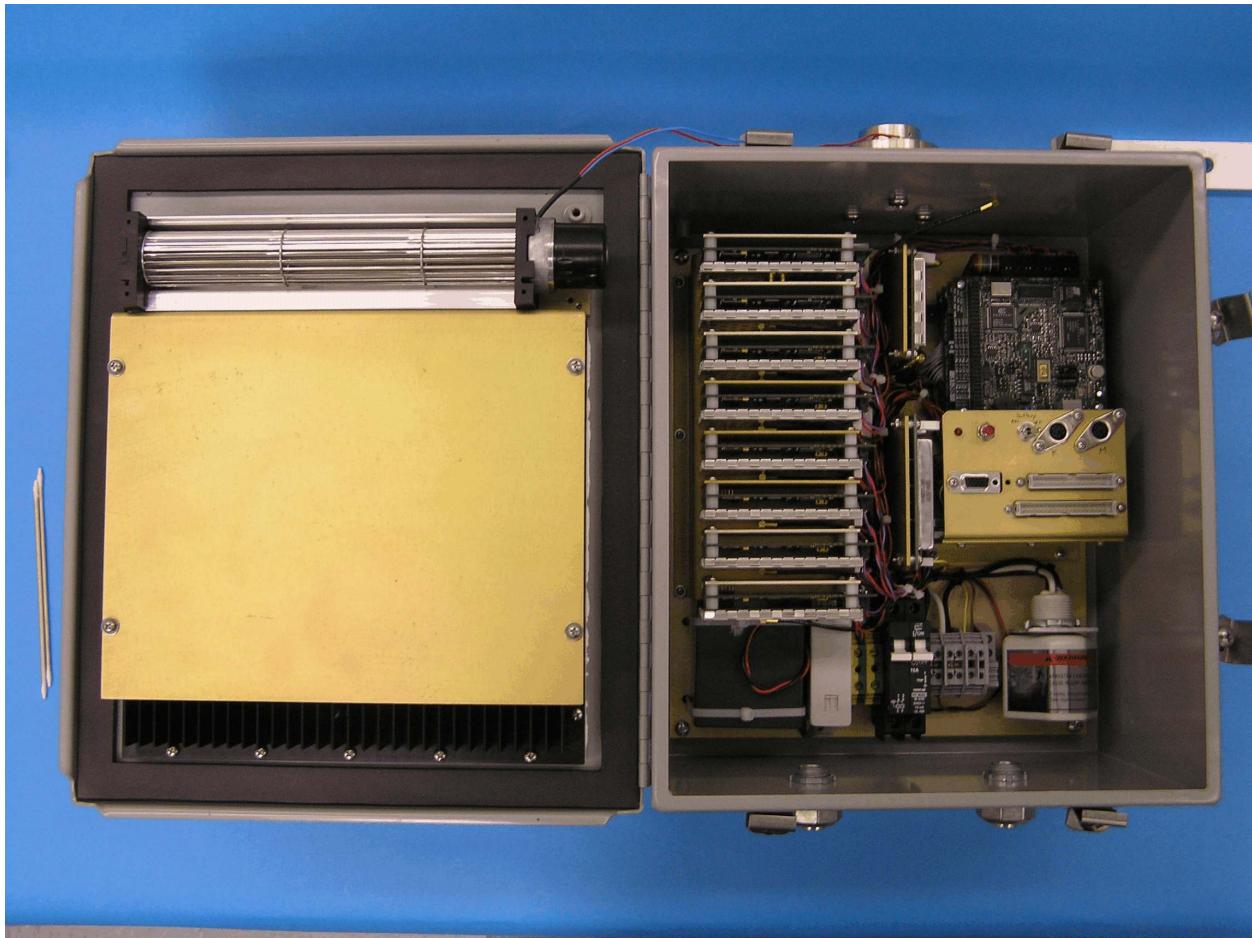


Photo 10 Internal Side 1

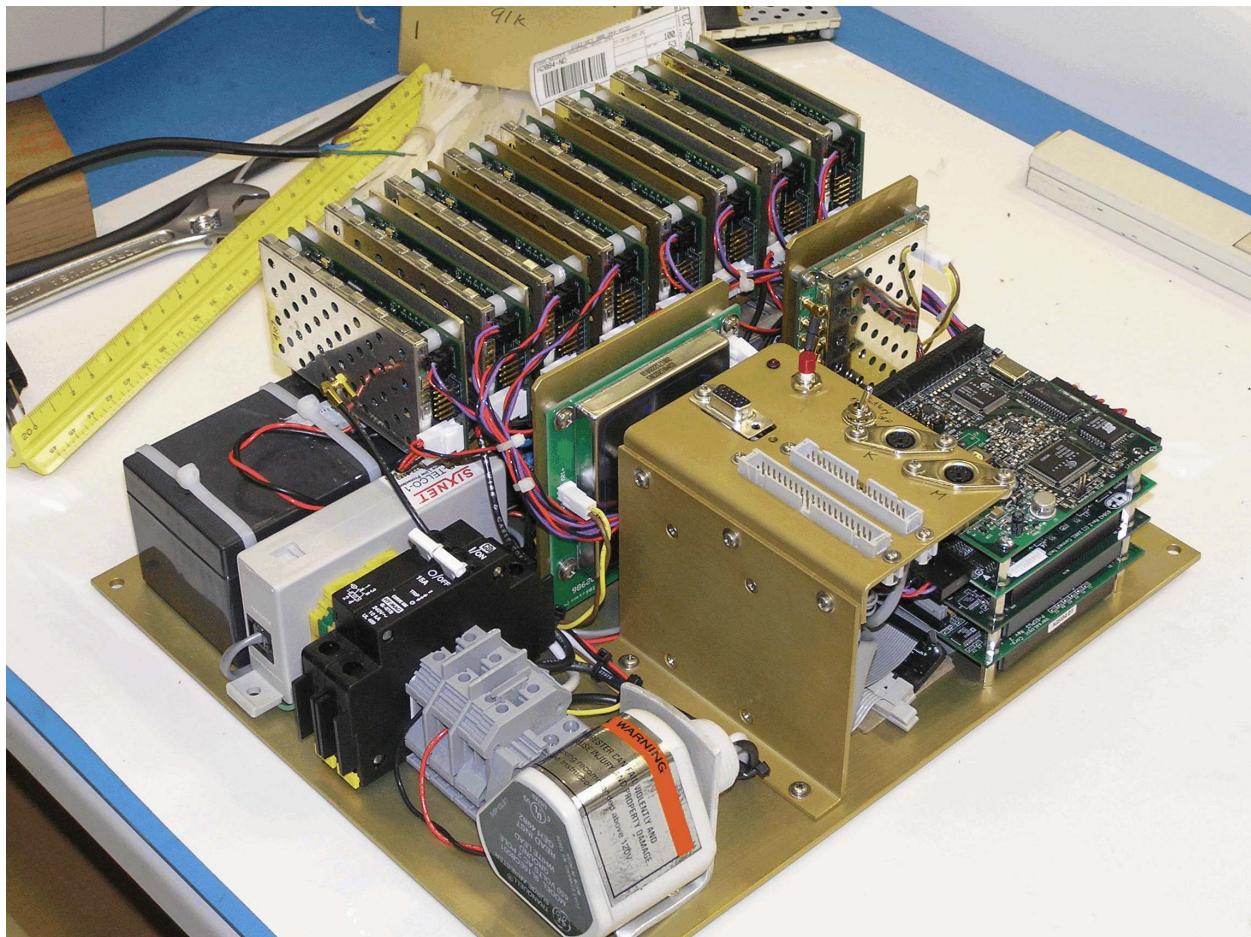


Photo 11 Internal Side 2

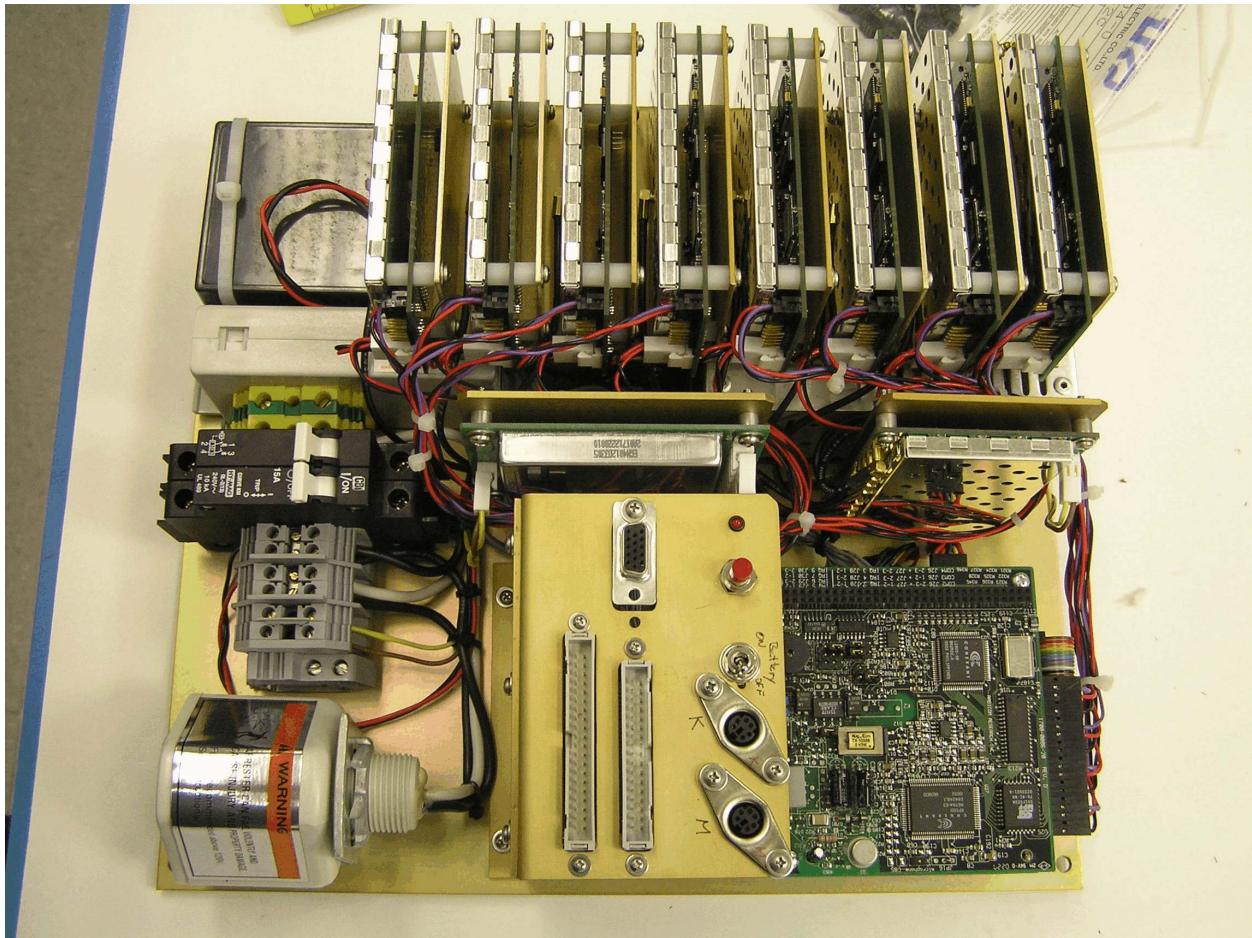


Photo 12 Internal Side 3

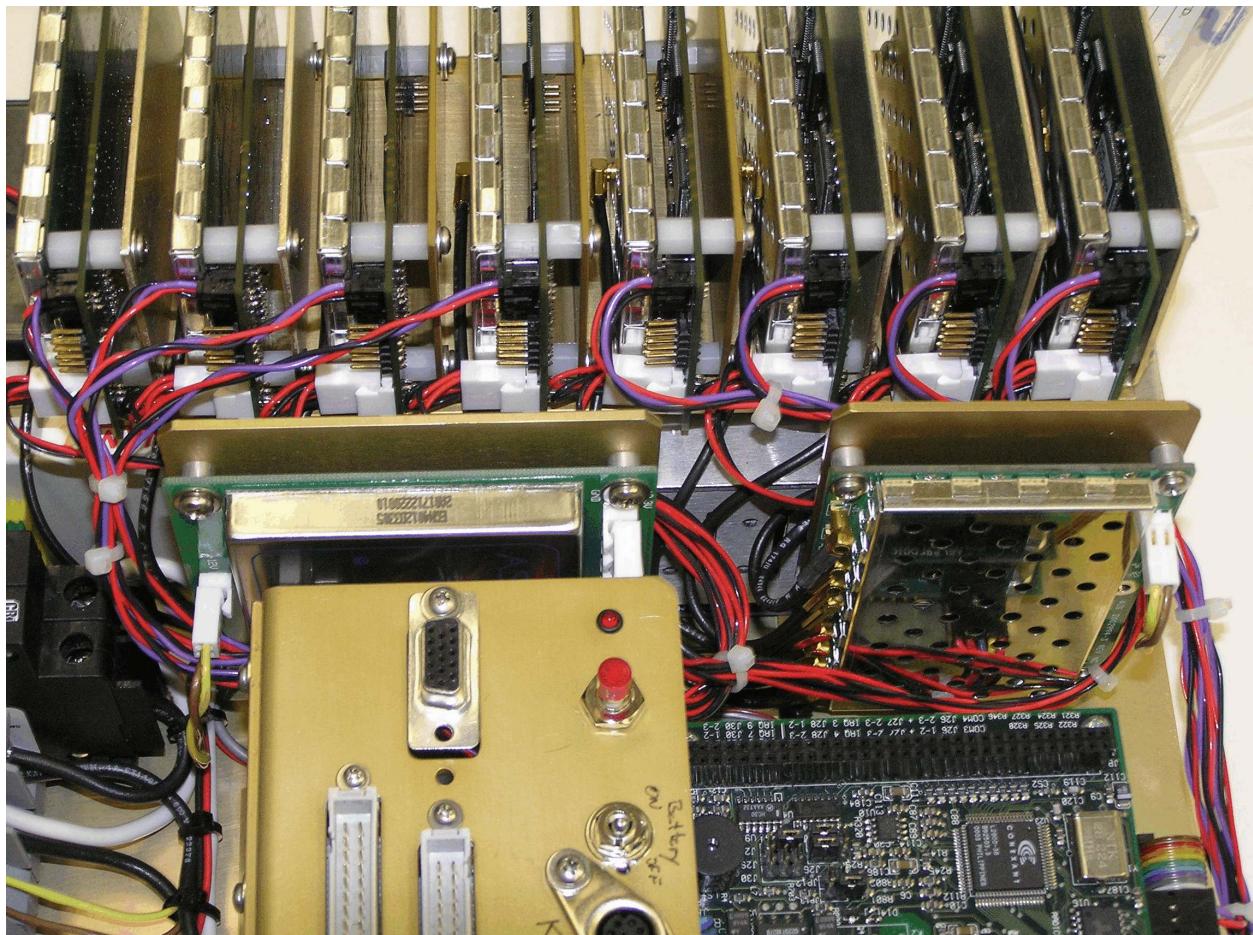


Photo 13 Internal Side 4

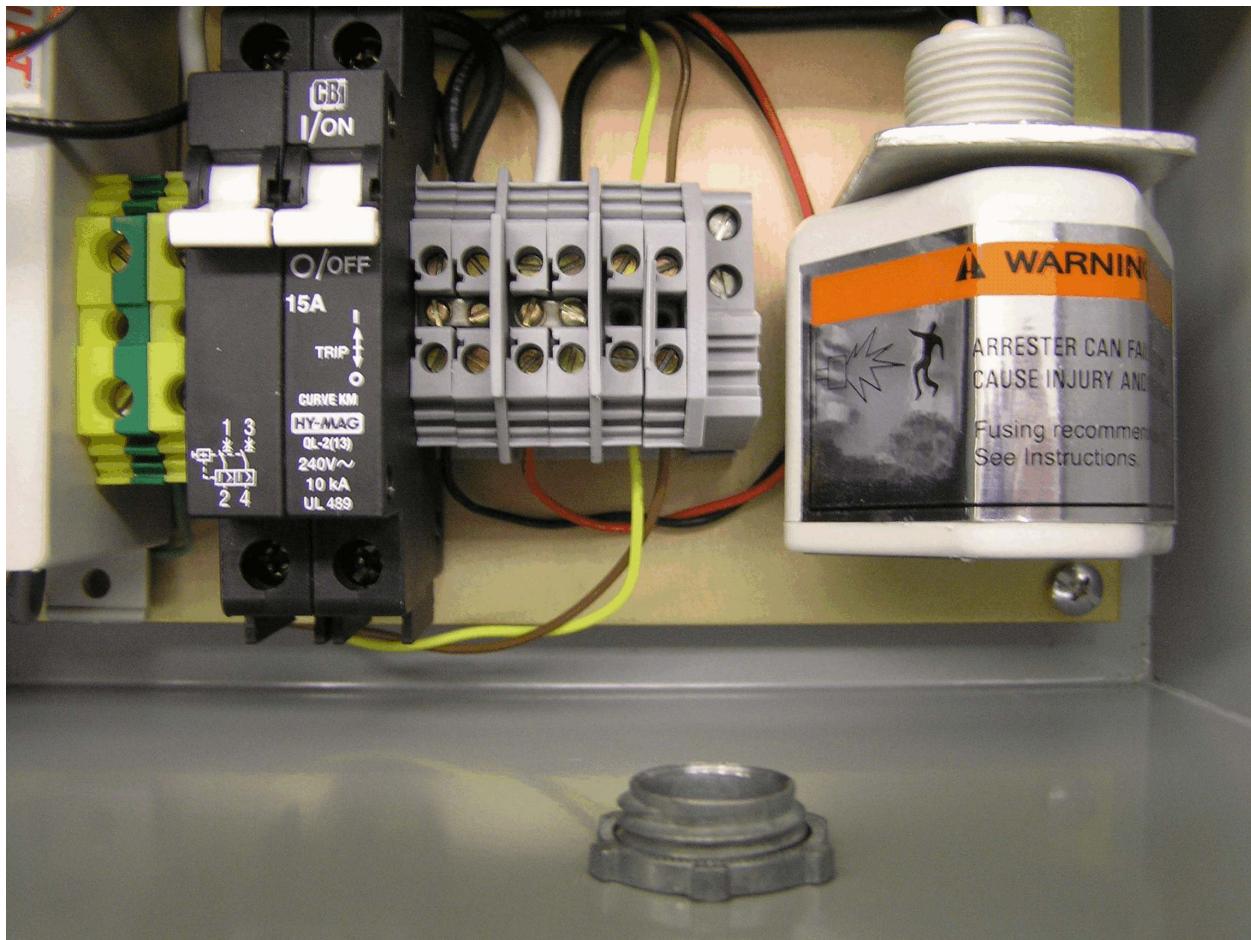


Photo 14 External Front

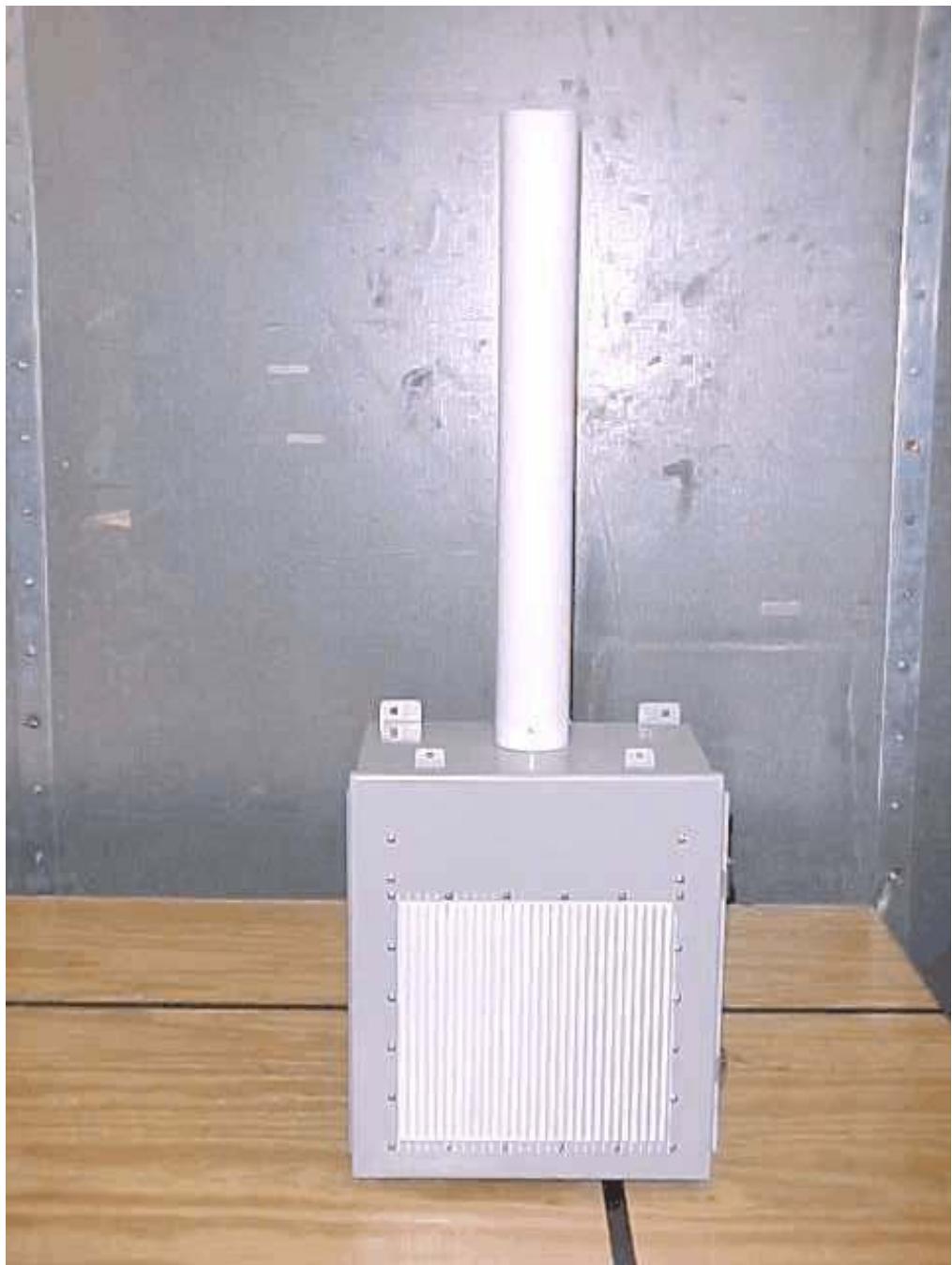
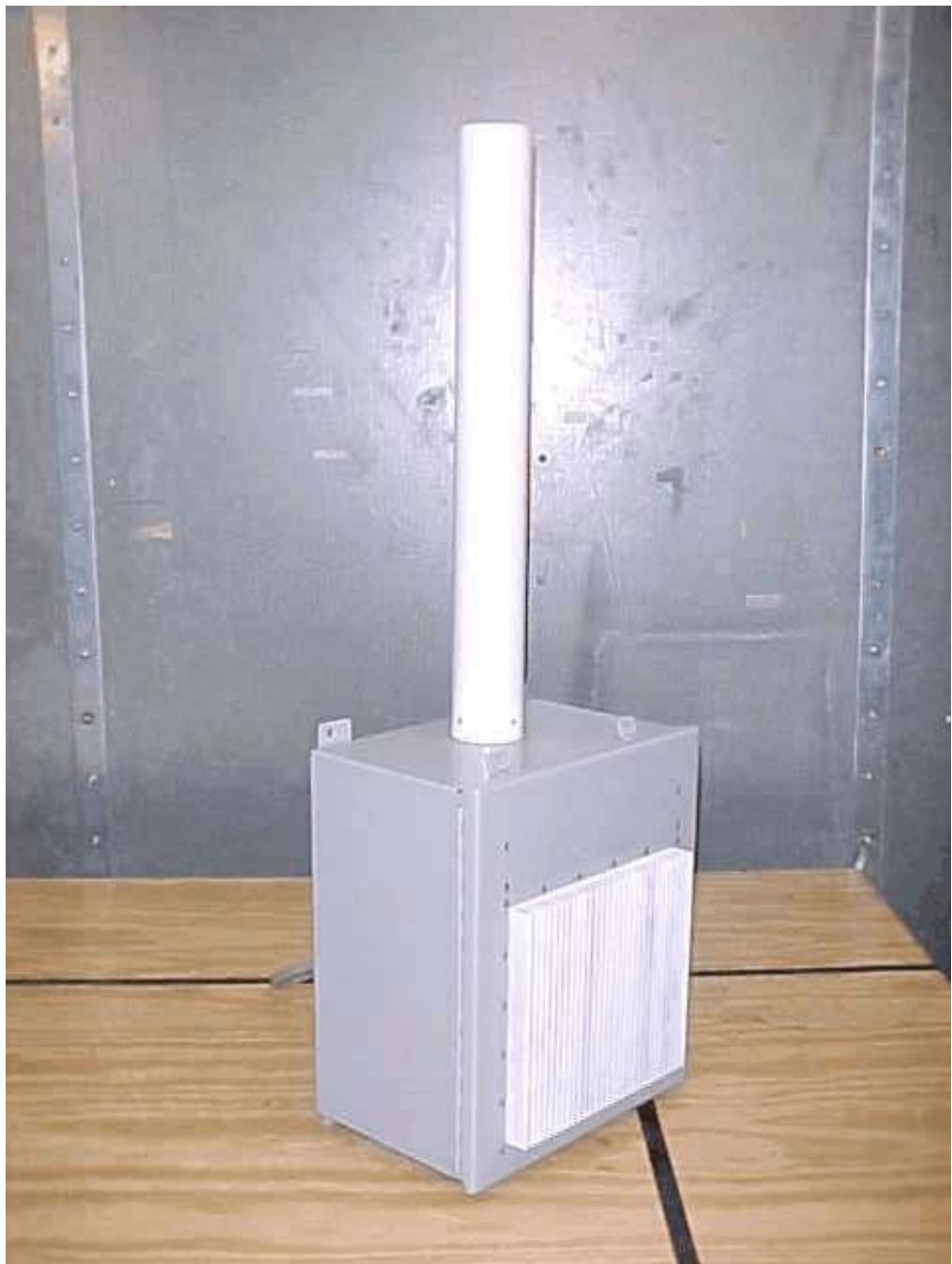


Photo 15 External Rear



Photo 16 External Angle



15.247 (2,b,5) RF Exposure Requirements

Reference CFR 47 Part 1.1307(b)(1)

RF Exposure – MPE Calculations (902 - 928 MHz Band)

Transmitter Power: 332 mW

Antenna Gain: 6 dB

Cable loss: 1 dB

Frequency range: 902 - 928 MHz

Assumptions

1. A single $\frac{1}{4}$ wavelength radiating antenna is assumed.
2. Closest exposure distance is assumed to be 20 cm

Calculations

The following results shall be assumed to be accurate for the far-field only. These predictions will over-estimate power density in the near-field. Based on the use of a $\frac{1}{4}$ wavelength radiator, a distance of 20 cm is considered to be in the far-field for all cases.

$$S = PG/4\pi R^2$$

P is 332 mW

G is 5 dB (Antenna gain – loss)

R is 20 cm

$$S = 0.209 \text{ mW/cm}^2$$

For Occupational/Controlled Exposure

From 300 to 1500 MHz, power density limit is $f/1500 \text{ mW/cm}^2$

@ 902 MHz, power density limit is 3.007 mW/cm^2

For General Population/Uncontrolled Exposure

From 300 to 1500 MHz, power density limit is $f/1500 \text{ mW/cm}^2$

@ 902 MHz, Power density limit is 0.601 mW/cm^2

Conclusion: ***Meets MPE limits***

End of Report