

## **Certification Exhibit**

**FCC ID: OOSNRMH902  
IC: 9378A-NRMH902**

**FCC Rule Part: 15.247  
IC Radio Standards Specification: RSS-210**

**ACS Report Number: 10-0346.W06.11.A**

**Manufacturer: L3 Nova Engineering  
Model: MH902**

## **RF Exposure**

**General Information:**

Applicant: L3 Nova Engineering  
 ACS Project: 10-0346  
 Device Category: Fixed  
 Environment: General Population/Uncontrolled Exposure

**Technical Information:**

Antenna: Omni-directional, Laird Part No. FG9026  
 Antenna Gain: 8 dBi  
 Cable Insertion Loss: 2.4dB (60' LMR-400)  
 Maximum Transmitter Conducted Power: 29.47 dBm  
 Maximum System EIRP: 35.07 dBm, 3213.7 mW

Antenna Type: Yagi, Laird Part No. YS8966  
 Antenna Gain: 11 dBi Yagi  
 Cable Insertion Loss: 5.1dB (130' LMR-400)  
 Maximum Transmitter Conducted Power: 29.47 dBm  
 Maximum System EIRP: 35.37 dBm, 3443.5 mW

**MPE Calculation**

The Power Density (mW/cm<sup>2</sup>) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
914.8	29.47	0.61	885.12	5.9	3.890	22	0.566

NOTE: MPE calculations based on maximum conducted power with antenna gain adjusted for cable insertion loss. Antenna gain for Yagi antenna is 11dBi, - 5.1dB for cable insertion loss. Total system antenna gain is 5.9 dBi.

**Installation Guidelines**

The installation manual should contain text similar to the following advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

**RF Exposure**

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 22 centimeters will be maintained.

**Conclusion**

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.