## 3 REFERENCES

3.1 Assembly Drawings:

3.1.1 DWG-4010651 CAD Assembly of M/LC Elect cover to baseplate

3.1.2. DWG-4010645 CAD Assembly of M/LC Electonics into cover

3.1.3. DWG-4017649 Photo Assembly Doc of M/LC Electonics Unit

3.2 Schematics

3.2.1 SCH-285-0200 Schematic of 302394 (285) Interface Board

3.2.2 DWG-4010647 Component Assembly of 302394 Interface Board

## 4 DESCRIPTION / THEORY OF OPERATION

4.1 The 302395 M/LC Electronics Unit takes a standard Cisco BR350 Bridge (industrial version), and places it into a Hardened aluminum enclosure along with other ciruit board to provide a complete ruggedized wireless access point solution. A ½ Watt RF Linx RF Bi-directional amp is added to increase the range of the unit (8 miles at 2Mbps and 3 miles at 11.0Mbps). A SKII OEM GPS Module from Trimble has been added so that the unit is able to report back it's position at all times. A Digi-ConnectME module enables monitoring of the GPS, the SSN chip, as well as providing Analog I/O for Monitoring Battery levels and Temperature. A custom MMS circuit board was designed in order to interface the various components, hold the Digi-ConnectME module, provide power distribution and protection, as well as connector interfacing.

## 5 BLOCK DIAGRAM