Internal Photographs of ProJet® MJP 2500 RFID Antennas and Controller

Antennas: The four antenna boards are mounted on a grounded sheet metal plate with metal removed beneath the antenna as to not interfere with the RF operation. This sheet metal plate is then enclosed within a grounded sheet metal material drawer assembly. The antennas are exposed to the tag locations on the consumable material bottles as the material bottle lowers with bottle insertion.



Material Distribution Module (MDM) with material bottles installed: Antenna locations are shown using arrows

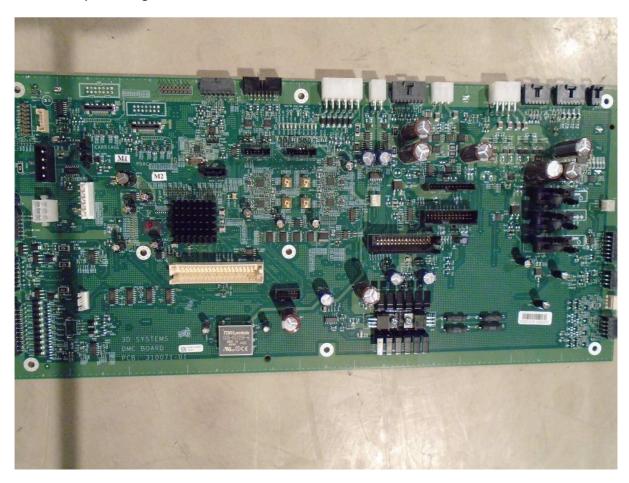


Material Distribution Module (MDM) with material bottles removed: Antenna locations are shown using arrows

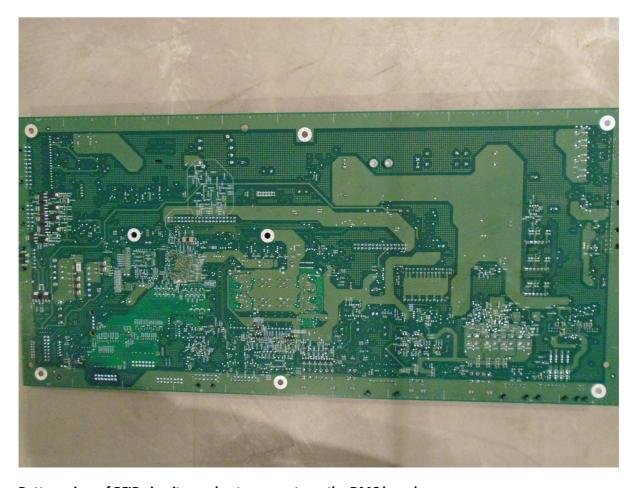


Material Distribution Module (MDM) with material bottles removed: Close-up view of antenna locations

RFID Controller: The RFID controller circuitry is located on the DMC circuit board. It is permanently mounted inside a metal electronics enclosure that is screwed shut. The metal electronics enclosure is accessible by removing the rear door.



Top view of RFID circuitry and antenna ports on the DMC board



Bottom view of RFID circuitry and antenna ports on the DMC board



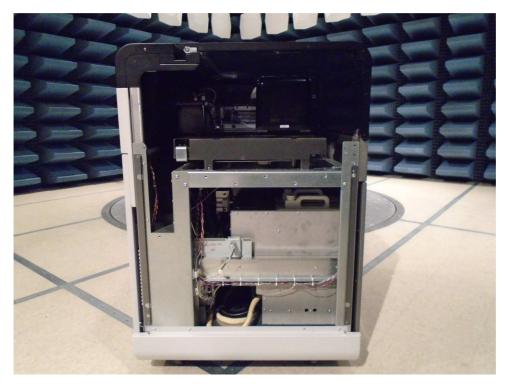
Front view of ProJet® MJP 2500 with doors open



Rear view of ProJet® MJP 2500 with rear access door removed



Cover removed from electronics enclosure; DMC board mounted vertically inside of ProJet® MJP 2500



Left side view of ProJet® MJP 2500 with cover removed