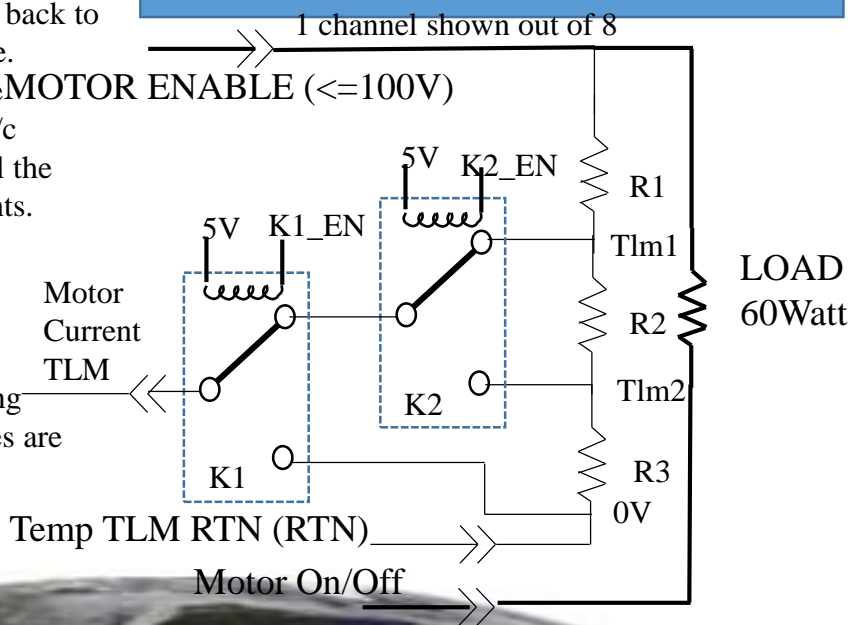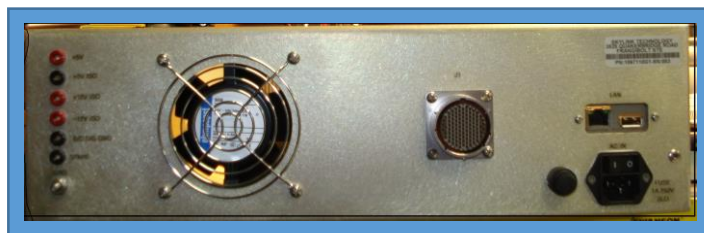# SKYLINK
Technology, Inc.

Multi-Motor Array (MMA) STE Chassis:

General Description:

This chassis has 8 loads. There are three telemetry states that can be selected to feed back as telemetry. These three telemetry states may be selected manually or via a user interface. In addition, there are 4 circuits to provide temperature telemetry values back to the system.

Details:

• 8 Channels with Power Resistor loads at up to 100V to Spacecraft to simulate Motor Drive

• 8 Channels of Simulated Telemetry back to the spacecraft. Schematic shown here.

• 4 Channels may be used for passive Temperature Telemetry back to the s/c

• User Interface over LAN to control the unit and view status and measurements.

• Manual or Automatic Control

• Automatic (script) control ensures repeatable test.

• Thermal overload monitoring

• Used for open loop spacecraft testing

•Interlock function ensures that cables are connected properly.

1 channel shown out of 8

MOTOR ENABLE (<=100V)

MMA Temperature Telemetry Requirement

S/C Side

MMA STE

A/D

Temp TLM Current Source Input

S/C GND

Temp TLM RTN (GND)

5V   K3_EN

R4

R5

K3

Effective Resistance
Relay open: R4 + R5
Relay closed: R4
Pots: 10K ohm

Lamp ON:
Relay is closed
Effective R is R4: Low
Indicates: HOT

Lamp OFF:
Relay is Open
Effective R is R4+R5: High
Indicates: COLD