# RaceGrade

Document Number		RG_SPEC-0011	
Title		Telemetry Filters	
Revision	Date	Prepared By	Change History
1.0	09/26/2011	Chris Brown	Initial release

### Pit Lane Filter

This bandpass filter is optimal for operating in the 900-928 MHz frequency range. It will block the lower 400MHz voice and data radios, as well as block out the higher 1.5/2.4/5 MHz frequencies used for live TV radios. The insertion loss is relatively low, and will work best with high gain antennas like the **Race Grade** 8db omni.

#### **Specifications:**

· Connectors: SMA Female / SMA Male

Impedance: 50 OhmInsertion Loss: 1.1 dB

• Max RF Power: 5W at 100°C

• Temperature Range: -40°C to 100°C

• Weight: 15 grams

• Dimensions: 1.2" x 0.75" x 0.46"

Part # M TEL PIT FILTER



## In-Car Filter

This low pass filter is optimal for operating in frequencies below 1000 MHz. It should help prevent interference of the telemetry radio bleeding into the highly sensitive GPS antenna. It will also block out the higher 1.5/2.4/5 MHz frequencies used for live TV radios. The insertion loss is relatively low, and will work best with high gain car antennas like the **Race Grade** 2.5db.

#### **Specifications:**

Connectors: SMA Female / SMA Male

Impedance: 50 OhmInsertion Loss: 0.7 dB

Max RF Power: 3.5W at 100°C
Temperature Range: -40°C to 100°C

• Weight: 10 grams

• Dimensions: 1.43" x 0.41"

Part # M TEL CAR FILTER



Note: Please prevent the housing or connectors from touching chassis ground or anything which conducts electricity like carbon fiber. The filter is wrapped in shrink help isolate the unit from noise.