RaceGrade 4G LTE Pro-V3 Radio Spec Sheet

Part Number	RG.DV.0180.02		Document Number	RG_SPEC-0113
Title	4G LTE Pro-V3 RaceGrade Radio			
Revision	**Date**	**Prepared By**	**Change History**	
0.3	10/02/2023	Kyle McClelland	Maximum Baud Rate added	

Introduction
Telemetry Radios are used to supply live data streams from one Radio to another in a smooth seamless manner. This is accomplished using Cellular Data to transfer raw input data from one Radio to another. This allows the Radios to have signal at long distances without any dropouts, provided the radios stay within Cellular Coverage.

Overview
The new re-designed radios use a large variety of frequency bands that are supported within both 4G LTE and 3G ranges. The radios supply fast update rates to allow accurate data while simplifying trackside by using a point-to-point connection. The case features a new SIM Card access door and a design to withstand harsh environments, vibrations, and water splashes with the enclosure tight seal, and AutoSport connectors. CAN integration has been added to control power up and reset procedures and provide diagnostic information from the radio.

Specifications
Peak D/L: Up to 600 Mbps
Peak U/L: Up to 150 Mbps
4G LTE Frequency Bands: B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B18, B19, B20, B26, B28, B29, B30, B32, B41, B42, B43, B46, B48, B66
3G Frequency Bands: B1, B2, B4, B5, B6, B8, B9, B19
Power Supply: 9 – 30 VDC
Current Use: <1A Maximum normal use, < 3A Max. internal supply charging (60 seconds max charge time)
Operating Temperatures: -40 °C to + 70 °C / -40 °F to + 158 °F
Storage Temperature: -40 °C to + 85 °C / -40 °F to + 185 °F
Mass: 425 grams / 0.93 lbs
Maximum Baud Rate: 230400 bps

Cellular Antenna and Diversity:
- 2 Antenna SMAs

Wiring Information
Main: AS610-35SN Mating Connector
- Pin 1 -   Reserved
- Pin 2 -   RS 232 TX1
- Pin 3 -   RS 232 RX1
- Pin 4 -   Reserved
- Pin 5 -   Ground
- Pin 6 -   Reserved
- Pin 7 -   CAN Low
- Pin 8 -   CAN High
- Pin 9 -   Ground
- Pin 10 -   Reserved
- Pin 11 -   Reserved
- Pin 12 -   Shutdown Switch
- Pin 13 -   Power

Ethernet (Eth): ASL606-05HE Mating Connector
- Pin 1 -   Ethernet RX (+)
- Pin 2 -   Ethernet RX (-)
- Pin 3 -   Reserved
- Pin 4 -   Ethernet TX (+)
- Pin 5 -   Ethernet TX (-)