

ENGINE CONTROL UNIT TAG-300



TAG-300 is a compact, self-contained engine controller and data logger for engine management applications in top level motorsport. It can manage an engine of up to twelve cylinders and includes many innovative features that make it our most powerful and advanced engine management system. TAG-300 can also be supplied with 4 Moog valve drivers, this version has 10 injection drivers.

In Formula 1 applications, TAG-300 would typically be used with the MCU-300 chassis management system. TAG-300 is configured by System Monitor and the logged data is in a suitable format for display and analysis by ATLAS.

Electrical

- Supply Voltage 7.9 to 16.0V DC
- Supply Voltage not to exceed 17V continuous (the unit is protected against transients and reverse polarity)
- Supply Current quiescent (ignition off) 7mA typical @12V
- Supply Current operating (no load on inputs) 1.8A typical @13.8V
- TAGOS 32-bit Real Time Operating System
- Control Processor MPC555
 - 50 MHz 32-bit PowerPC core
 - Integrated double-precision floating point unit
 - 448kbyte on-chip Flash ROM
 - 26kbyte on-chip SRAM
 - Two on-chip 16-channel Timer Processor Units
 - Two on-chip CAN 2.0B controllers
 - 1MByte Flash ROM, 1Mbyte Burst SRAM, 512kbyte battery-backed SRAM
- Data-logging/comms processor MPC860T
 - 50MHz 32-bit PowerPC core
 - Four on-chip serial communication controllers
 - On-chip 10/100 Base-T Ethernet controller
 - Forward Error Correction for telemetry data
 - Real Time Clock
 - 1Mbyte Flash ROM, 1Mbyte Burst SRAM, 1Mbyte battery-backed SRAM
- Data-logging memory capacity 64Mbytes Flash
- Data retention not battery dependant

Application

Control and monitoring of engine

Connection definition

- Integral, sealed, military standard connectors

Chassis connector	79 way	CGK-S0T 20N-35PB
Sensor connector	79 way	CGK-S0T 20N-35PN
Ignition connector	19 way	CGK-S0T 14N-19PN

- For pin numbers please request Product Specification EDD99-01

Mechanical

- Case material Magnesium alloy, chromate converted and painted with black epoxy
- Weight less than 1.22kg

Environmental

- Splash resistant to standard motorsport fluids
- Lids sealed with O rings and screws sealed with silicone rubber)
- Maximum humidity 100%
- Minimum operating temperature 0°C
- Internal Temperature not to exceed 70°C as measured by internal diagnostic sensors
- Storage Temperature -10°C to 85°C
- Vibration 100 to 1000Hz, all axes, 24 hours

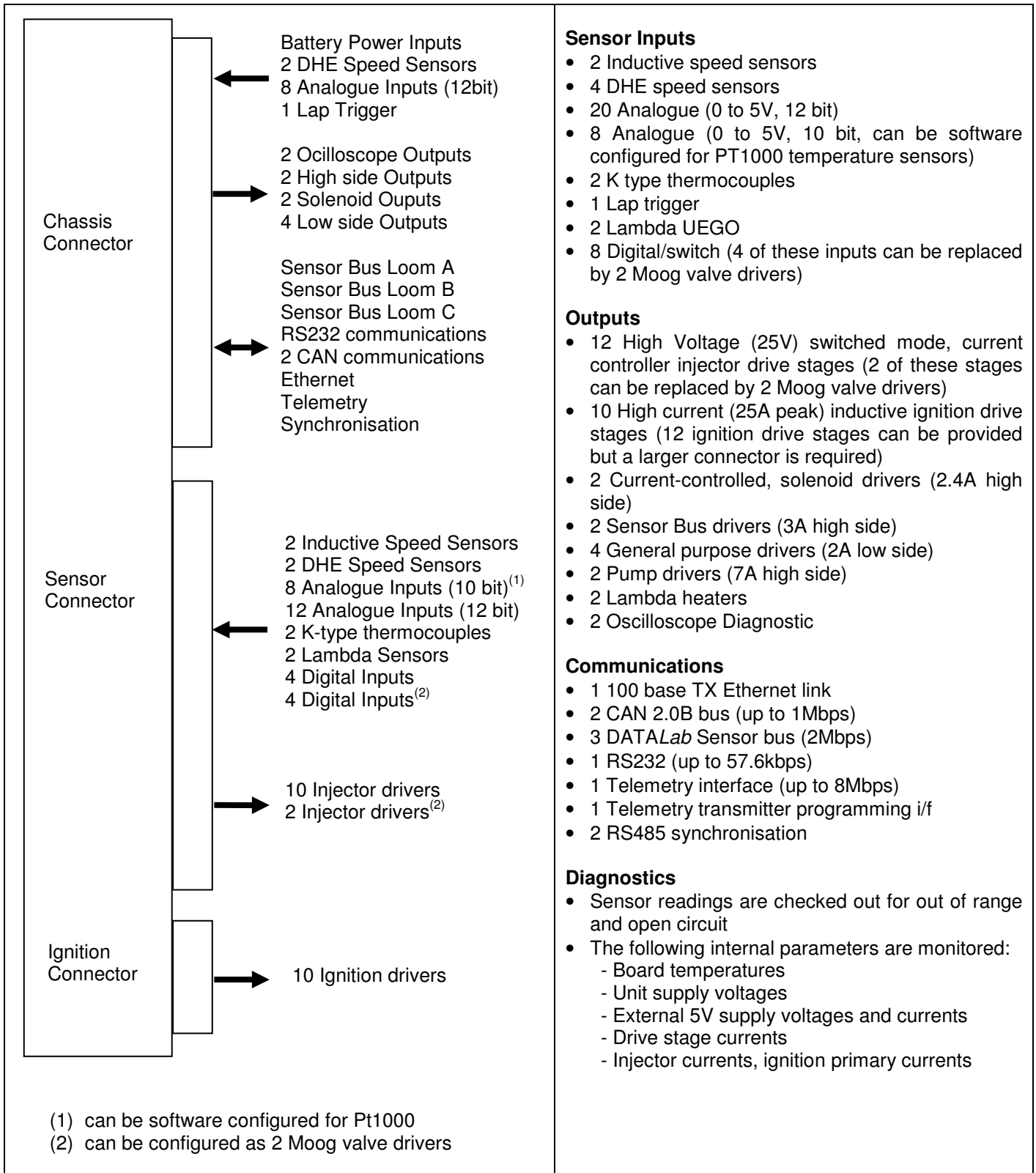
Electro Magnetic Compatibility

- Complies with the essential protection requirements of 89/336/EEC

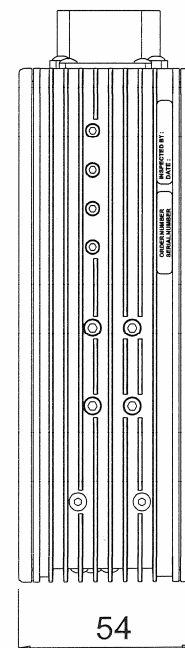
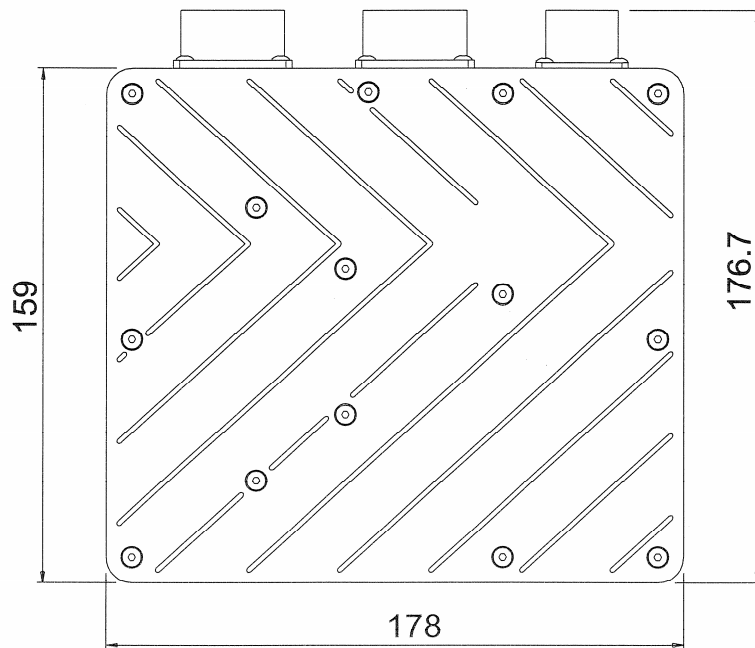
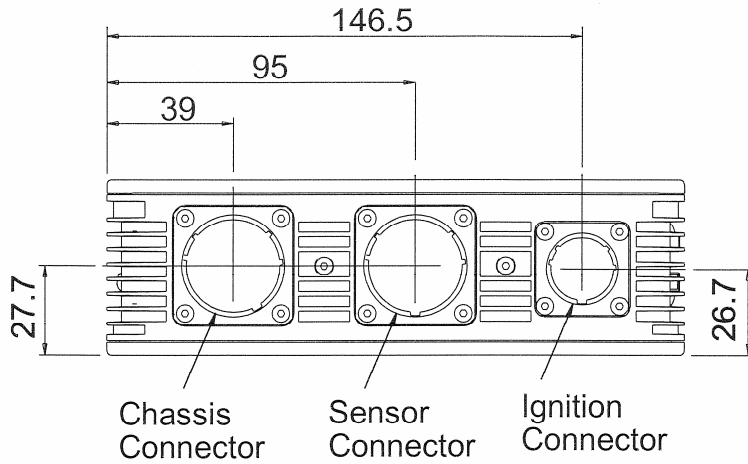
Service

Recommended service interval 12 months (internal battery is replaced)

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Description	Injector Drivers	Moog valve drivers	Order Code
TAG-300	12	None	O 030 012 010 002
TAG-300	10	4	O 030 012 010 005

TAG-300 can be tailored to your application in which case it will be given a unique order code. Please contact our technical consultancy service to discuss your requirements.