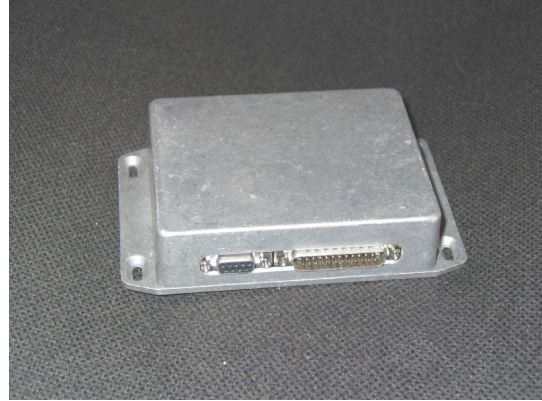


TSLM2100

Factsheet



Turbine Start and Limiting Module

The TSLM2100 is a Turbine Start and Limiting Module customized for the Walter M601 type turboprop engines providing many benefits over existing systems. Using this module not only significantly reduces the amount of wiring, but provides added functionality:

Features:

- Manages the powering of the Igniter Box, Start Contactor, Start Interrupter Valve and Electro Hydraulic Transducer (fuel valve) during the engine start-up process. The return path of EHT can be wired to an current limiting resistor internal to the module.
- Senses key engine parameters including Inter-Turbine Temperature (ITT), Compressor Speed (N1), Battery Current (Amps) and Battery Voltage to perform its control functions as well as for Fault Detection.
- Limits ITT to prevent over-temperature conditions from developing by automatically actuating the Electro Hydraulic Transducer (EHT) in time.
- Keeps track of the engine's total running hours and number of starts to inform the operator of necessary engine inspections.
- Records key engine parameter waveforms (e.g. ITT, N1, Amps, Volts versus Time) in a history log for later analyses on a Personal Computer.
- Employs a Dual Micro-processor architecture to provide Fail-safe operation. The processors monitor each other for correct operation.
- Supports Ignition Check, Run and Start operations.
- Drives an external Trouble Light providing rapid problem location. Different blinking sequences will identify different problem areas.
- Supports interfacing to a Controller Area Network (CAN) giving digital communication capability with more devices over a high-speed network.
- Has an electrically isolated RS-232 interface for connecting to a PC/Laptop's serial port providing easy downloading of recorded data as well as quick changing of the module's configuration.
- Comes equipped with internal Voltage Booster to be able to remain operational at very low input voltages coming from the normally 28Vdc system, which can be strained especially during engine start-ups.
- Unit is designed to MIL-STD-704E - Aircraft Electric Power Characteristics and is housed in a Rugged metal enclosure.