

HEALTH MONITORING UNIT

HC-1000

Tellumat



Tellumat's HC-1000 Health and Control Unit provides the health monitoring and control interfaces that are not catered for in a standard UAS autopilot or flight mission computer. The HC-1000 receives commands and provides status values directly to the autopilot or FMC via a RS422/485 serial bus.

The HC1000 is utilised to provide the following:

- Analogue to Digital functionality that provides the monitoring of engine RPM, primary and secondary bus voltages and an emergency battery voltage;
- Thermocouple functionality that allows the monitoring of engine cylinder head or exhaust gas temperatures;
- Relay functionality to allow the switching of navigation and strobe lights, arrester hook release or brake control;
- Serial functionality to control a voice communication transceiver as well as Audio functionality for the radio.

The HC1000 provides a centralised interface for the connecting of all the health monitoring systems allowing for looming simplification resulting in less cabling mass as well as the provision for functionality expansion.

FEATURES

Centralised Health Monitoring Interface
Small sizing and low mass
Multiple health monitoring functionality
Multiple control functionality

BENEFITS

Single unit installation saving on cabling complexity
Fitment in any location is possible to save space
Single unit thus less mass and lower costs
Complimentary to autopilot allowing additional features

HEALTH MONITORING FUNCTIONS

Thermocouple	2
Analogue-Digital	6
Relay	4
Serial	1 x RS232; 1 x RS422
Audio	1

CONTROL FUNCTIONS

Thermocouple	2 x EGT/CHT
Analogue-Digital:	1 x 28vDC Bus
	1 x 12vDC Bus
	1 x 24vDC Battery
	1 x RPM
	1 x Fuel Level
	1 x Spare
Relay:	1 x Navigation Lights
	1 x Arrestor Hook
	1 x Brakes
	1 x Spare
Serial:	1 x RS232 for Voice Radio
	1 x RS422 for Autopilot interface
Audio	1 x Audio for Speaker and Mic interface

NOTE: All the above functions are configurable

GENERAL

Interface	RS422/485 & RS232
Baud Rate	460800 bps
Power Supply Voltage	10 - 36VDC
Power Consumption	<400mA
Dimensions	120mm x 75mm x 24mm
Mass	<200gm

ENVIRONMENTAL

Temperature	-20°C to +71°C
Vibration	MIL-STD-810G
Shock	MIL-STD-810G
EMC	MIL-STD-461E



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