

# ACORE | HUMS

HEALTH & USAGE MONITORING SYSTEM

#Avionics



EXTENSIVE INTERFACE CAPABILITY  
SUPPORTS SMART SENSOR SUITE



**aselsan**

# ACORE | HUMS

## HEALTH & USAGE MONITORING SYSTEM

ACORE HUMS is a sensor-based monitoring system that enables Condition-Based Maintenance by measuring the health and performance of mission-critical components in rotary wing aircraft. By continuously monitoring vibration at numerous points throughout the drivetrain, and pinpointing mechanical faults before they become catastrophic failures, ACORE HUMS provides actionable information that allows informed maintenance decisions. ACORE HUMS reduces maintenance costs of aircraft systems while increasing availability

With its reliable and rugged design, ACORE HUMS meets harsh environmental requirements of various Rotary Wing Aircrafts.

### General Specifications

- Wide Range Of Interfaces
- Fanless Design

### Interfaces

- Discrete Signal Input Interfaces (32)
- Discrete Signal Output Interfaces (20)
- ARINC-429 Receive Interfaces (4)
- ARINC-429 Transmit Interfaces (2)
- RS-422/485 Receive Interfaces (2)
- RS-422/485 Transmit Interfaces (2)
- Accelerometer Interface (28)
- Magnetic Tachometer Interface (5)
- Optical Tachometer Interface (2)
- Optical Tracker Interface (1)
- 100/1000Mbps Ethernet Interface (1)
- USB 2.0 Interface (1)
- CANBUS Interface (3)
- MIL-STD-704F 28VDC Power Input

### Physical Specifications

- Dimensions : 290 mm (W) X 90 mm (L) X 225 mm (H)
- Weight : < 4.5 kg

### Technical Specifications

- Rotor Track and Balance
- Drive System Vibration Based Monitoring
  - Engine
  - Gear Boxes
  - Rotor (Main and Tail)
- Engine Performance Monitoring
- Engine Power Assurance Check
- Flight Regime Monitoring
- Flight Data Recording
- Parameter Monitoring and Out of Limit Alarms
- Power Input: 28VDC (Nominal)
- Power Consumption: 45W (Nominal)/60W (Maximum)
- Power hold-up for Short Time Power Interrupts

### Environmental Conditions

- Operational Temperature and Altitude: -40°C / +71°C, 20.000 ft
- Storage Temperature: -55°C / +85°C

### Qualifications

- MIL-STD-704
- MIL-STD-810 / DO-160

Specifications are subject to change without any notice. | All tolerances are within ±10%.

