

3500 or Orbit 60 Which is right for you?

For many of you, the 3500 has been the premier turbomachinery protection system choice for decades. For others, you may have heard about the reputation of the 3500, but felt it lacked some key feature you needed for plant-wide asset monitoring. Here is a quick comparative overview highlighting some key enhancements with Orbit 60 helping you make the best decision for your application and organization overall. For more information, please visit bakerhughes.com/cordant.

3500



Centralized deployment architecture

Size: 6U (typically 2-3 in a cabinet)

Single module (TDI) for Configuration access and Condition Monitoring requiring bidirectional data flow

Only front modules are hot-swappable

Wide range of unique application-specific cards

Each processor supports the 4 channels on that module

Single chassis architecture: monitoring functionality is limited to the card that the sensor is connected to and module to module communication is limited to a single chassis

Supports 4 Keyphasor inputs

Publishes sensor data to the control system

No status indicators on I/O (rear) side of rack

Electro-Mechanical relays

Modules are designed for specific functions

External display only (VGA)

Dynamic vibration channel fixed and limited to 800 lines of spectral resolution

Optimized for fluid Film Bearing Machines

Jumper-configurable input modules

No front-end rack health telemetry data

Orbit 60



Centralized and distributed deployment architecture

Size: 3U (4+ in a cabinet)

Segregated Configuration and Condition Monitoring modules (SIM and CMM)

All modules are electrically hot-swappable (auto configuration in future release)

PAV card alone can cover 90% of typical inputs, allowing greater flexibility and parts consolidation
50%+ reduction in spares requirement

Any input channel can have redundant processor providing multiple levels of redundancy (increase availability)

Distributed deployment: multiple modules can communicate within the chassis and among other chassis through bridging (upcoming)
50%+ reduction in field wiring requirements for a new project

Any dynamic input channel can be used for Keyphasor input

Architected for bi-directional control system communication (upcoming)

LEDs for each channel with detailed health data covering module, wiring, and transducer (front and rear)

Electro-Mechanical and Solid-State relays

Modules are architected to make all data available for a broad range of applications

External networked display or integral display (upcoming)

Configurable dynamic vibration resolution (3200+ lines)

Optimized for all machine types including REB

Jumperless, channel-level configuration, native support for positive voltage powered transducer types

Telemetry data available for device health monitoring and diagnostics