Description

The CMM listens to all information within the system, including all measurements, waveforms, digital transducer signals, system controls, status information, system configuration information, process data from external systems, and alarm and events logs. It only listens, with no capability to write, allowing interface to System 1 over the business networks, with no risk to the protection system.

Each module occupies two slots within the system. Placing multiple CMM modules allows the connection of two independent System 1 clients to the Orbit 60 System. Data is transferred to System 1 continuously, but in the event the connection is lost or System 1 is not utilized, non-volatile storage buffers historical data until the information is off-loaded to the host software. System 1 can configure the CMM module to extract additional measurements and waveforms from system sensor data.

Each module has two independently configurable RJ-45 Ethernet ports. OK LEDs indicate proper operation and LINK LEDs show good communication to the system.
# Condition Monitoring Module

## Condition Monitoring Module (CMM)

<table>
<thead>
<tr>
<th>Data Communications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 ethernet ports – utility or rear side</td>
<td>Independent Ethernet ports 1000/100/10 Base-T Auto-negotiation</td>
</tr>
<tr>
<td>Connector</td>
<td>RJ-45</td>
</tr>
<tr>
<td>Cable Length</td>
<td>100 meters (328 feet) max</td>
</tr>
</tbody>
</table>
Compliance and Certifications

FCC
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

EMC
European Community Directive:
EMC Directive 2014/30/EU
Standards:
EN 61000–6–2; Immunity for Industrial Environments
EN 61000–6–4; Emissions for Industrial Environments

Electrical Safety
European Community Directive:
LV Directive 2014/35/EU
Standards:
EN 61010–1;
EN 61010–2–201;

RoHS
European Community Directive:
RoHS Directive 2011/65/EU

Cyber Security
Designed to meet IEC 62443

Maritime*
ABS Rules for Condition of Classification, Part 1
- Steel Vessels Rules
- Offshore Units and Structures

Functional Safety*
SIL 2
* Approvals pending

Hazardous Area Approvals

CSA/NRTL/C
Class I, Zone 2: AEx/Ex ec nC IIC T4 Gc;
Class I, Zone 2: AEx/Ex nA nC IIC T4 Gc;
Class I, Division 2, Groups A, B, C, D T4;
Class I, Division 2, Groups A, B, C, D T4 (N.I.);
T4 @ Ta= -30°C to +65°C (−22°F to +149°F)

ATEX/IECEx
II 3 G
Ex ec nC IIC T4 Gc
Ex nA nC IIC T4 Gc
T4 @ Ta= -30°C to +65°C (−22°F to +149°F)
Ordering Information


Condition Monitoring Module

<table>
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<tr>
<th>Ordering Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>60R/CMM01–AAA</td>
<td>AAA – Hazardous Area Certifications</td>
</tr>
<tr>
<td>00</td>
<td>No Hazardous Area</td>
</tr>
<tr>
<td>01</td>
<td>CSA/NRTL/C (Class I, Div 2)</td>
</tr>
<tr>
<td>02</td>
<td>Multi (CSA, ATEX, IECEx)</td>
</tr>
<tr>
<td>XXX</td>
<td>Country Specific Approvals</td>
</tr>
</tbody>
</table>
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