Cobalt UHF™
Rugged UHF RFID Controllers for Industrial Automation

FEATURES & BENEFITS

COBALT product family industrial RFID supports many fieldbus architectures for easy integration into existing factory networks.

C-MACRO™ command software and Dashboard utility simplify development and installation.

EPC Class 1 Gen 2 UHF standard is supported for maximum compatibility with tags from many sources.

Long-range reading distance for many factory automation, WIP, and other industrial uses.

Rugged case and connectors assure protection from moisture and dust in harsh environments.

Easy to read LED indicators provide helpful diagnostics for power, RF signal, and communications.

All models available in both ETSI and FCC frequency bands.

Rugged, highly connected EMS COBALT UHF™ RFID systems provide easily integrated and economical solutions for auto-ID on the factory floor. Dust and moisture protection assure years of reliable operation in harsh environments.

Connectivity is a hallmark of the Cobalt family including built-in options for Modbus TCP and Ethernet IP. In addition, CAN Open, Profinet, and CC Link are supported by the Datalogic CBX family of connection modules.

25+ years of experience with RFID systems for manufacturing are behind every EMS system, supported by Datalogic around the world.

CONNECTIVITY MODELS
UHF-CNTL-232-02-XX
UHF-CNTL-485-02-XX
UHF-CNTL-IND-02-XX
UHF-CNTL-DNT-02 (in 2009)
UHF-CNTL-PBS-02 (in 2009)

XX = 91 or 86 for freq. type

COMPATIBLE TAGS
UHF-G2-525HT
UHF-G2-525 (in 2009)
All EPC Class 1, Gen 2.

RFID AIR PROTOCOL
EPC Class 1, Gen 2.
DATALOGIC AUTOMATION RFID BUSINESS UNIT PROUDLY OFFERS THE EMS LINE OF RFID TAGS, READERS, CONTROLLERS, ANTENNAS, AND COMMUNICATIONS GATEWAYS.

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**Cobalt UHF™**

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**SPECIFICATIONS**

<table>
<thead>
<tr>
<th></th>
<th>91 Models</th>
<th>86 Models</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RF Frequency</strong></td>
<td>902 - 928 MHz (FCC part 15)</td>
<td>865.6 - 867.6 (ETSI EN 302 208)</td>
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<tr>
<td><strong>Nr. of Channels</strong></td>
<td>50 per FCC part 15</td>
<td>10 per ETSI EN 302 208</td>
</tr>
<tr>
<td><strong>Reference Antenna</strong></td>
<td>UHF-ANT-3030-01-91</td>
<td>UHF-ANT-2626-01-86</td>
</tr>
<tr>
<td><strong>Emitted Power with Reference Antenna</strong></td>
<td>2.8 Watts ERP</td>
<td>1.7 Watts EIRP</td>
</tr>
<tr>
<td><strong>Freq. Tolerance</strong></td>
<td>+/-10 ppm</td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>164x112x48mm</td>
<td></td>
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<tr>
<td><strong>RFID Standard</strong></td>
<td>EPC Class 1, Gen 2</td>
<td></td>
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<tr>
<td><strong>Power Supply</strong></td>
<td>24 Vdc (10-30Vdc)</td>
<td></td>
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<tr>
<td><strong>Consumption</strong></td>
<td>6.7 Watts; 280ma @ 24Vdc; 1 amp peak.</td>
<td></td>
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<tr>
<td><strong>Protection Class</strong></td>
<td>IP65</td>
<td></td>
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<tr>
<td><strong>Shock Resistance</strong></td>
<td>EN 60068-2-27 30G; 11ms, 3 shocks on each axis</td>
<td></td>
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<tr>
<td><strong>Vibration Resistance</strong></td>
<td>EN 60068-2-6 1.5mm; 10 to 55Hz; 2 hrs ea axis</td>
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<tr>
<td><strong>Operating Temp.</strong></td>
<td>-20 to 60 C (-4 to 165F)</td>
<td></td>
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<tr>
<td><strong>Storage Temp.</strong></td>
<td>-40 to 85 C (-40 to 185F)</td>
<td></td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>95% non condensing</td>
<td></td>
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<tr>
<td><strong>Connectors</strong></td>
<td>M12; TNC type female</td>
<td></td>
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<tr>
<td><strong>Status LED’s</strong></td>
<td>Power, Comm, RF On</td>
<td></td>
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</tbody>
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**ACCESSORIES**

**ANTENNAS**

- 30x30cm (915MHz); 26x26cm (865MHz)

**CABLE**

- 3-meter Coaxial Cable UHF-CBL-03

**COMMUNICATION**

- EMS Gateway and Hub to Subnet16™
- DATALOGIC CBX500 Connection Box with:
  - BM600 CAN Open Module
  - BM700 Profinet Module
  - BM1100 CC-Link Module

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www.ems-rfid.com

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