# XBMCU

# MULTI-INTERFACE MACHINE CONTROL UNIT

**HIGHLIGHTS**

- Multi-interface receiver and machine control unit with high EMI performance for mobile machines, industrial and robotic applications and shunting applications
- Machine-to-machine functionality can be supported in both directions with high data volume
- Compatible with the Safe-D-Stop™ and all CattronControl™ and latest generation Remtron™ transmitters
- Dual CANbus interfaces that support J1939, CAN FD, CANopen, and CANopen Safety
- Supports lab-certified PROFINET® communications for reliable, real-time data handling with Class C Conformance
- Uses CattronLink™ wireless programming tool for performance and feature updates
- Highly encrypted RF communication protocol according to the Cyber Resilience Act

**FEATURES**

- IP66-rated aluminum housing for tough environments
- Wide range 9-36 VDC supply
- Category 3 PL-d ethernet, supporting Modbus TCP/IP, Ethernet/IP, PROFINET, and PROFIsafe® (under certification) in controller and machine mode
- Supports IEC 61131 programming and configuration with CattronLink using ST
- Eight digital inputs can be combined for Category 3 PL-d configurations
- Six 3A digital outputs can be combined for Cat 3 / PL-d
- Closed box configuration, programming and analytics over wireless or ethernet
- Black channel wireless interface
- Data logging

**APPLICATIONS**

- Robotics
- Mobile machines and heavy equipment
- Rail applications such as rail car movers and shunting vehicles
- Material handling
- Overhead electric traveling crane
- Industrial automation systems
- Logistics control and monitoring

# XBMCU

## TECHNICAL DATA AND SPECIFICATIONS

### ELECTRONIC DATA

| | |
|---|---|
| **Digital Circuitry** | Dual processor |
| **System Address** | 24-Bit = 16 million addresses |
| **Power Supply** | 9-36 VDC 20W |

### RF

| | |
|---|---|
| **Frequency Range** | License exempt: 915MHz, 433MHz, 868MHz. Licensed: 450-470MHz 2.4 GHz |
| **Connection** | Two supporting 2.4GHz or Sub-GHz antenna diversity |
| **Antenna** | Various antenna options are available (see accessories) |
| **Telegram** | Dynamic high-efficiency telegram |
| **Data Security** | Enhanced bi-directional black channel communication |
| **Transmitter Power** | 10-500 mW |

### COMPLIANCE

| | |
|---|---|
| **ISO 16750-1/-3/-4** | Road vehicles environmental |
| **ISO 7637-2/-3** | Road vehicle electrical disturbances power and non-power |
| **ISO 13766** | Earth-moving machinery electromagnetic compatibility (radiated immunity) |
| **EN 60204-1** | Safety of machinery – electrical equipment |
| **EN ISO 13849** | Functional safety Category 3 PL-d |
| **ISO 11898-2** | CANbus fault protection |
| **RF Compliance** | Approved in all regions of sale per national and regional requirements |

### MECHANICAL DATA

| | |
|---|---|
| **Weight** | Approx. 2 lbs (900g) |
| **Dimensions L x W x H** | 2 x 8 x 6 inches (50 x 200 x 150 mm) |
| **Housing** | Robust aluminum, fully shielded for high EMI environments |
| **Operating Temperature** | -4° to +140°F (-20° to +60° C) |
| **Shock Resistance** | 17G |
| **IP Protection** | IP66-rated |

### INTERFACE

| | |
|---|---|
| **Digital Output** | Six 3A, 24 VDC solid state max PL-d (36 VDC max) |
| **Digital Input** | Eight 24 VDC (36 VDC max) |
| **CANbus** | Two CAN ports supporting J1939, CANopen, CAN FD, CANopen Safety |
| **Modbus** | RS-485 supporting Controller/Machine modes |
| **Ethernet** | 10/100Mbps supporting Modbus TCP/IP, Ethernet/IP, PROFINET, PROFIsafe (under certification) |

### ACCESSORIES

| | |
|---|---|
| **Antennas** | Please specify the frequency, application and type. Mobile applications: <br> - Chassis NMO mount and line kit <br> - Magnet mount and line kit <br> Industrial applications: <br> - Magnet mount and line kit <br> - Pole or wall mount and line kit |

CATTRON

PI CERTIFIED
PROFIBUS • PROFINET