

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





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, PROFI-safe (under certification)

ACCESSORIES	
Antennas	Please specify the frequency, application and type. Mobile applications: <ul style="list-style-type: none">- Chassis NMO mount and line kit- Magnet mount and line kit Industrial applications: <ul style="list-style-type: none">- Magnet mount and line kit- Pole or wall mount and line kit

North America: +1.234.806.0018 | Sales.US@Cattron.com

Europe: +49.2151.4795.0 | Sales.EU@Cattron.com

UK: +44.1932.238121 | Sales.UK@Cattron.com

South America: +55.19.3518.7030 | Sales.BR@Cattron.com

Asia: Sales.CN@Cattron.com

Oceania: Sales.AU@Cattron.com

cattron.com

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