



MACHINE CONTROL UNIT

HIGHLIGHTS

- Designed to meet tough mobile application requirements
- High safety implementation with latest generation microcontrollers in a category 3 PL-d configuration
- Custom CAN configuration and application programming with CattronLink™ using structured text
- Closed box configuration, programming and analytics
- Supplied with an antenna, line kit and cable harness
- Compatible with Remtron™ 411, 611 and PatriotPro, Safe-D-Stop™ and CattronControl™ LRC-S1, LRC-M1, LRC-L1, Excalibur, MKU and SCU32

FEATURES

- Compact safety controller housed in a rugged IP66 aluminum housing
- Wide range 9-36 VDC supply
- Dual CANbus interface that supports CANopen, CANopen Safety and J1939 protocols
- Eight PL-d outputs
- High EMI performance in tough environments
- Data logging
- Black channel wireless interface

APPLICATIONS

- Mobile applications such as boom pumps, truck cranes, man lifts, pavers, mobile conveyors, rock crushers, grinders, woodchippers, and utility cable handlers
- Rail applications such as rail car movers and industrial shunting robots
- Robotic applications such as automated pallet movers or AGV robots





TECHNICAL DATA AND SPECIFICATIONS

ELECTRONIC DATA

Digital Circuitry	Dual 32-bit microcontrollers
System Addressing	24 bits = >16 million addresses
Power Supply	9-36 VDC 20 W

RF

Frequency Range	License exempt: 915MHz, 433MHz, 868MHz, 2.4GHz, licensed 450-470MHz
RF Connection	Two SMA supporting antenna diversity on 2.4GHz or Sub-GHz
Multi-Pin Connection	Plug and 6-foot (2m) multi-core cable
Antenna	Various antenna options available based on the operating environment
Telegram	Dynamic high-efficiency telegram
Data Security	Bi-directional black channel communication

COMPLIANCE

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

MECHANICAL DATA

Enclosure	Robust aluminum fully shielded for high EMI environments
Weight	Approx. 2 lbs (900g)
Dimensions	Approx. 2x8x6in (50x200x150mm)
Operating Temperature	-40° to +140° F (-40° to +60° C)
Shock Resistance	17g
IP Protection Class	IP66

INTERFACE

Digital Out	Eight PL-d: 2 X 10A, 6 X 4A All are configurable as digital or PWM
CAN	Two ports supporting J1939, CANopen, CANopen Safety, 125kbps to 1Mbps over independent or dual channel architecture

ACCESSORIES

Antennas	Various types of antenna kits are available, please specify application. <ul style="list-style-type: none">• Outdoor applications with direct antenna N-Type chassis mount and line kit• Outdoor application with magnet mount and line kit• Indoor applications with magnetic mount and line kit• Indoor applications with angle bracket for pole or wall mount with line kit
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