

CCM12

CATTRONcontrol™



CANBUS MACHINE CONTROL UNIT (MCU)

HIGHLIGHTS

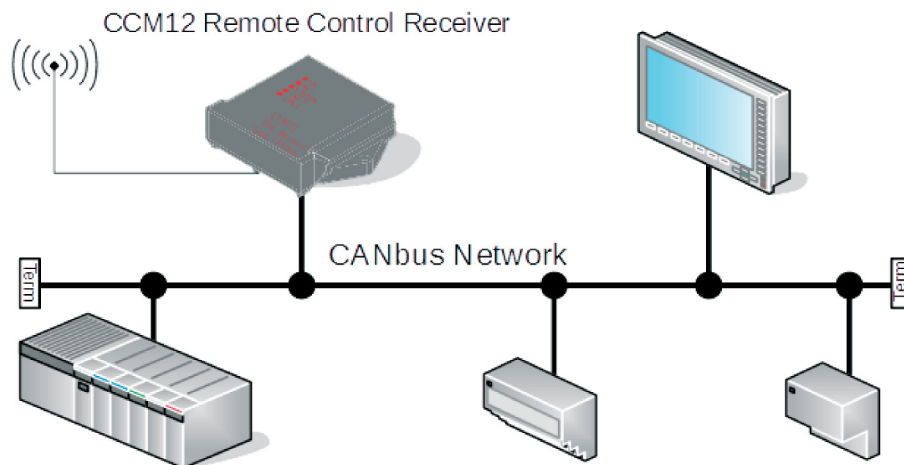
- Greatly simplifies the installation of a Remote Control System onto any CANbus based vehicle
- The CCM12 acts as a gateway between the Operator Control Unit (OCU) and a vehicle's main computer
- Supports a variety of Operator Control Units including those with proportional joysticks
- Bi-directional, all functions executed on the OCU are transferred on the CANbus network and vehicle vital signs are sent back to the OCU
- High safety class through redundant hardware and software design
- Housing made of high impact-resistant polycarbonate resin with protection class IP66

FEATURES

- Dual CANbus interfaces that meet ISO 11898-2 standard
- Safety relays (Master-Slave) stop the machine in case of an emergency
- A dual processor, redundant architecture, meeting ISO13849 Category 3 PLd
- RF ID Transkey™ sets frequency and address for simple spares deployment
- Supports CANopen or SAE J1939 standard protocols.

APPLICATIONS

- Most vehicles designed to operate over a CANbus network can be remote controlled using a CCM12 CANbus receiver MCU
- The CCM12 may be used in Industrial environments (e.g. Overhead Cranes) when the machine is controlled by a Programmable Logic Controller (PLC) equipped with a CANbus port.
- Tele-Remote applications using CANbus - Ethernet converters



TECHNICAL DATA AND SPECIFICATIONS

RF	
Frequency range	335 MHz 418-419 MHz 433-434 MHz 447 MHz 410-470 MHz 868-869 MHz 903-927 MHz
Transmission speed	4.8 to 20 kbit/s
Transmitter output power	410-470 MHz: up to 500mW All others: <10 mW
Receiver sensitivity	-107 dBm

ELECTRONIC DATA	
Digital circuitry	Dual-processor technology
System addresses	24 bits = 16 million addresses
Security relay type	EN 50205, type A
Safety relay switching current	4 A, fused
Shock resistance 16msec	17 g

MECHANICAL DATA	
Dimensions L x W x H	122 x 144 x 48 mm
Operating temperature	-20° to +60° C (-4° to +140° F)

NORMS AND STANDARDS	
IP protection class	IP 66
Safety standards	EN 954-1 category 3 for all safety related functions EN 13849-1 Performance Level d

CAN INTERFACE CHARACTERISTICS	
CAN format	CAN 2.0A and CAN 2.0B
Bus speed	10, 20, 50, 125, 250, 500, 1000 kbps
Standard	ISO 11898-2
Protection	Exceeds ISO 11898-2 Bus fault protection (-27 to +40 V) Transient voltage (-200 to +200 V)

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