Radio receiver EFB-CAN with CAN bus interface

Features

- CAN format 2.0A and 2.0B
- CAN data rate of up to 1 Mbit/s
- Fixed-code protocol (code length 20 to 40 bits)
- Compatible with EFS-HS... / EFS-SS... / EFS-xRP / EFS-12MP radio handheld transmitters
- Connection: screw terminals or 5-pin M12 connector
- Configuration via USB using a computer (Microsoft Windows 7 or later)
- Available for the frequency bands 433 MHz (ISM) or 868 MHz (SRD)

Description

The radio receivers of the EFB-CAN series are suitable for all non-safety-critical applications that require wireless operation via a radio handheld transmitter or a stationary radio transmitter, and a CAN bus connection in CAN format 2.0A and 2.0B.
The radio receiver can be configured quickly and easily using free software and by connecting to a computer via the USB interface.
The receivers of the EFB-CAN series are available in numerous versions based on various product features (e.g. enclosure, electrical connection, RF modules, etc.).

Function

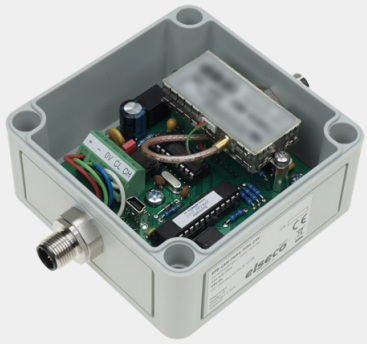
An overview of the key features:

- Configuration using standard or extended ID
- Transmission rate from 125 kbit/s up to 1 Mbit/s
- Various protocol output modes selectable (Normal, Continuous, Single, Remote Frame)
- Up to 16 codes (1 code per button resp. key combination or input channel) and thus 16 CAN commands with a data length of up to 8 bytes can be defined
- Adjustable CAN bus cycle time and signal time
- 120 Ω terminating resistor activatable via jumper
- Adjustment of RF parameters to compatible radio handheld transmitters

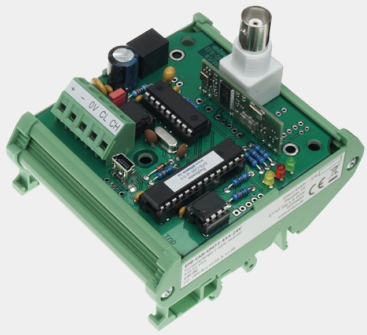
Application Examples

- Vehicle manufacturing
- Mechanical engineering
- Automation technology

EFB-CAN-PS94



EFB-CAN-UM72



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Technical Data	
I/O interface	CAN-Bus-Format 2.0A und 2.0B
Terminating resistor	120 Ω, activatable via jumper (see connection plan)
Frequency (band)	433.92 MHz (ISM band) | 868 MHz (SRD band)
Coding method	Fixed code (20 to 40 bits)
Configuration	via software (free of charge)
Configuration software	EFB-CAN-Config (Version depends on device firmware)
Configuration interface	Mini or Micro USB port Type B
System requirements	Microsoft Windows 7 or later
Antenna connection	For variants, see table „Order Code“
Electrical connection	Screw terminals 1.5 mm² | 5-pin M12 connector
Power supply	12...24 V DC
Current consumption	< 20 mA
Mounting type	Mounting rail TH 35 | Surface-mounted
Dimensions	see table
Protection class	see table
Operating temperature range	-20...+70 °C

Dimensions (H x W x D)	
PS94	94 x 94 x 57 mm
UM72	90 x 74 x 70 mm

Protection Class (DIN EN 60529)		
	PS94	**UM72**
BNCL	IP40	-
BNCS	-	IP00
TNC	IP66	-
KL	IP66	IP00
AI	IP66	IP00
SMA	-	IP00

Safety Instructions

- These radio receivers are not approved for use in safety-critical systems and are not SIL- or PL-certified.
- Where specific safety requirements apply, these must be met through overarching measures using equipment approved for that purpose.
- Work on the radio receiver must only be carried out when the power is switched off!

Installation Instructions

- Installation/commissioning may only be carried out by specialist companies or appropriately qualified personnel!

Operating Instructions

- The units may only be used as described in the manual.
- Only undamaged units may be used under the specified environmental conditions.

Order Code

Please note the color code in this table!
Color-coded features can only be combined with device versions that have the same color code.

Interface
CAN CAN Protocol V2.0B & V2.0A up to 1 Mb/s

Enclosure
PS94 ● Surface-mounted housing 94 x 94 mm (polystyrene)
PS94T ● Surface-mounted housing 94 x 94 mm (PS) with transparent cover
UM72 ● Open mounting enclosure for TH 35 mounting rail (PVC)

Antenna connection
BNCL ● Horizontal BNC socket
BNCS ● Vertical BNC socket
TNC ● TNC socket
KL ● ● Terminal connection
AI ● ● Terminal connection with antenna wire
SMA ● SMA socket

RF module / Frequency band
433 433.92 MHz
868 868.3 MHz
LR8 868.300 MHz | 869.525 MHz | 869.850 MHz

External power supply
12/24V 12...24 V DC

Cable glands
M12.5 ● 5-pin M12 connector
KV01 ● 1x M12
KV02 ● 2x M12
KV04 ● 1x M16
KV05 ● 2x M16

Configuration interface
USB1 Mini USB port Type B
USB2 Micro USB port Type B

EFB-CAN-PS94-BNCL-433-12/24V-M12.5-USB1