

RF2CAN

RANGE EXTENDER



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Features

Kar-Tech's RF2CAN module is a low-cost radio receiver that receives signals from our various wireless transmitters, and outputs them over CANbus using the standard J1939 or CANOpen protocols. It's epoxy potted into a small enclosure for easy mounting, and is OEM-configurable for easy integration into Parker IQAN™, Sauer-Danfoss Plus1™, Eaton F(x)™, or other programmable machine controllers. In addition to being a simple, low-cost radio receiver, the RF2CAN can provide large increases in RF reliability by adding extra RF receivers to your CANbus network. Our main receiver receives your transmitter's commands, along with signal strength and latency from the RF2CAN modules via CANbus, and decides on-the-fly where the most reliable signal is coming from. OEMs who have extremely complicated equipment benefit from RF portions of the software being taken out of the main module, thereby decreasing program size and increasing speed to process advanced logic and tight closed loops. With extremely large equipment, or those machines in noisy environments, distributing multiple RF2CAN modules increases reliability by giving the receiver module more signals to choose from. RF2CAN is a simple, low-cost way to control start/stop and throttle increase/ decrease directly to your J1939 engine. RF2CAN modules have on-board diagnostics, and come in a fully encapsulated enclosure, allowing them to withstand the most extreme environments. In alternate configurations, the RF2CAN acts as a wireless CANbus, taking CANBus messages and sending them over the air to matching RF2CAN receiver modules. By just wiring power, ground, CANHI & CANLO and cable shield in to and out of two mated modules, long wire runs are eliminated. OEM's who have extremely complicated wiring harnesses benefit from CAN portions of the harness being sent via RF instead of cable, thereby decreasing harness size and complexity. Multiple configurations are available including point to point, point to multipoint, and multipoint to multipoint to accommodate different installation types.

General

Weight	0.8 lb.
Operating Temperature	-40° to +85° C
Storage Temperature	-55° to +100° C
Ingress Protection	IP66
Housing Material	UL94 - HB High impact plastic
Certification	FCC, IC, C-Tick, others on request

I/O

Inputs	SAE-J1939, CANopen
Outputs	SAE-J1939, CANopen

Wireless

Frequency	900 MHz FHSS, 33mW output power 2.4 GHz DSSS, 100mW output power
Operating Range	300m nominal, greater line of sight

