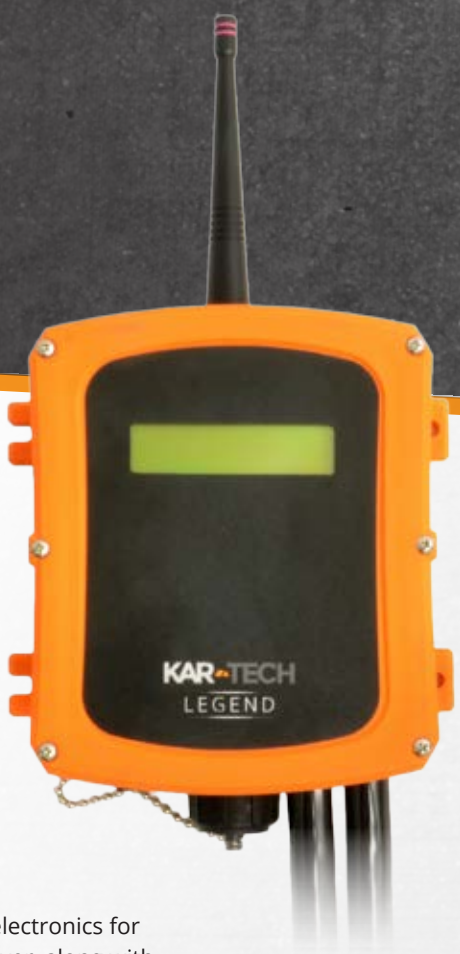
LEGEND
RADIO RECEIVER



Our LEGEND is our new state of the art radio receiver, now totally user-programmable using the CoDeSys platform. We've taken the core circuitry that we've had in the field, proven day after day for nearly twenty years, and built an entirely new feature-set around it. 35 input/output pins that can be configured in many different ways, dual CAN (normally J1939), a processor that runs at over 100MHz, loads of memory (and a real-time clock) for datalogging, huge flexibility to run nearly any of our RF modules, and an expansion port for connection to some really neat bleeding-edge technologies only available to our OEM partners.

We've implemented the CoDeSys runtime on several versions of the LEGEND receiver, so that the LEGEND is freely programmable, with the programming environment available as a free download. There are no additional costs past the receiver hardware! Programming can be done in several different methods: structured text, function block diagram, ladder diagram, etc—it's IEC 61131-3 compliant, making it a true wireless PLC. As far as we know, that makes it the first user-programmable radio control system in the mobile hydraulic market! It can be designed with any of our radio transmitters, and has full two-way built in – your software at the receiver can control elements on the handheld or bellypack as well.

The enclosure itself is fully sealed, and we can further encapsulate or conformally coat the internal electronics for severe duty use in mobile hydraulic systems. There are several display options available at the receiver, along with a control surface if desired for redundant/backup operation. Like all of our radio receivers, the LEGEND can be used either as a wireless receiver or as a standalone hydraulic controller or I/O module for any number of different applications. Multiple connector and cabling options exist to match your application requirements.

PHYSICAL

Weight	1.0 lb.	**IP Rating**	IP67	**Certification**	FCC, IC, C-Tick, others on request
Operating Temperature	-40° to +85° C	**Storage Temperature**	-55° to +85° C	**Housing Material**	High Temperature Nylon

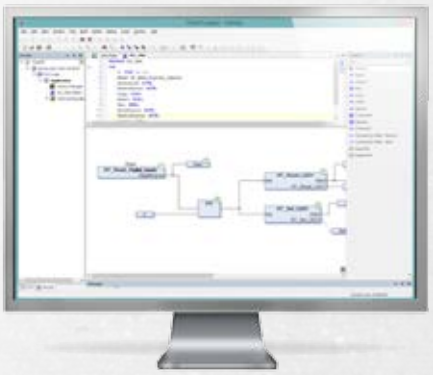
I/O:

Protocols	RS-232, CANbus (2x): SAE-J1939, RF: 900MHz FHSS or 2.4GHZ DSSS, Wi-Fi	
Supply Voltage	12V/24V nominal (9V – 30VDC)	
Analog Inputs	20 Maximum, 0-32VDC (other ranges available), 12-bit resolution with on-board 5V Reference supply available for sensors. Inputs are protected from overvoltage & transient spikes.	
Digital Inputs	27 Maximum	12/24V nominal input range with protection for overvoltage/transient spike
Frequency Inputs	2 Maximum	
Quadrature Inputs	1 Maximum	
PWM Outputs	13 Maximum (12 current regulated, 1 non-current regulated) 5A max, sourcing	
Digital Outputs	20 Maximum	
Variable Voltage Outputs	12 Maximum, 0-30V (other ranges available)	

***These are maximums only. Using all the inputs or outputs of one type may limit other I/O. Please contact us for no-charge application support.**

WIRELESS:

Frequency	900MHz FHSS, 2.4GHz DSSS with powers up to 100mW
Operating Range	Up to 300ft, 1,000ft, or 2,500ft (nominal)



CoDeSys Software