

# DUET

## RADIO RECEIVER

The DUET radio receiver is our largest one-box radio receiver, with a massive 48 I/O in it's low-profile enclosure. It's overpowered for our industry - running on dual ARM processors with tons of horsepower. It's highly I/O dense, packing up to 48 outputs in a robust package, and then urethane potted for severe duty use - vibration and weather are no longer issues. Of the 48 outputs, two are available as current-regulated PWM, 34 can be straight PWM without feedback, and we can configure in analog and digital inputs as well. RS-232 is on board for a variety of programming interfaces, as is CAN (typically via SAE-J1939), and the option for a display at the receiver. External connections are made via jacketed cable.



### PHYSICAL

<b>Weight</b>	1.0 lb.	<b>Ingress Protection</b>	IP67
<b>Operating Temperature</b>	-40° to +85° C	<b>Housing Material</b>	Encapsulated UL94 ABS
<b>Storage Temperature</b>	-55° to +85° C	<b>Certification</b>	FCC, IC, C-Tick, others on request

### I/O:

<b>Protocols</b>	Serial: RS-232, CANbus: SAE-J1939, RF: 900MHz FHSS or 2.4GHZ DSSS		
<b>Supply Voltage</b>	12V/24V nominal (9V - 30VDC)		
<b>Analog Inputs</b>	8 Maximum, 0-supply voltage (12/24VDC), 12-bit resolution with on-board +5VDC regulated analog reference for sensors. Inputs are protected for overvoltage/transient spikes		
<b>Digital Inputs</b>	8 Maximum		
<b>Frequency Inputs</b>	None	12/24V nominal input range with protection for overvoltage/transient spike	
<b>Quadrature Inputs</b>	None		
<b>PWM Outputs</b>	36 Maximum (2 current regulated, 34 non-current regulated) 5A max, sourcing		
<b>Digital Outputs</b>	48 Maximum		
<b>Variable Voltage Outputs</b>	38 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:

<b>Frequency</b>	900MHz FHSS, 2.4GHz DSSS. With powers up to 100mW
<b>Operating Range</b>	300ft, 1000ft, or Half Mile (nominal)

