

UV12 Datasheet

UV12 is a microcontroller based hydraulic valve controller with a rugged aluminum enclosure specifically meant for automotive vehicle control systems. **UV12** allows modular wire harness design by having power and CAN-bus in one connector and inputs & outputs in another connector.

- -30 ... +80 °C
- CAN 2.0B interface
- Durable aluminum enclosure
- Designed for 12V and 24V operation
- 20 proportional PWM outputs with current sense
- 2 current inputs 0 20 mA



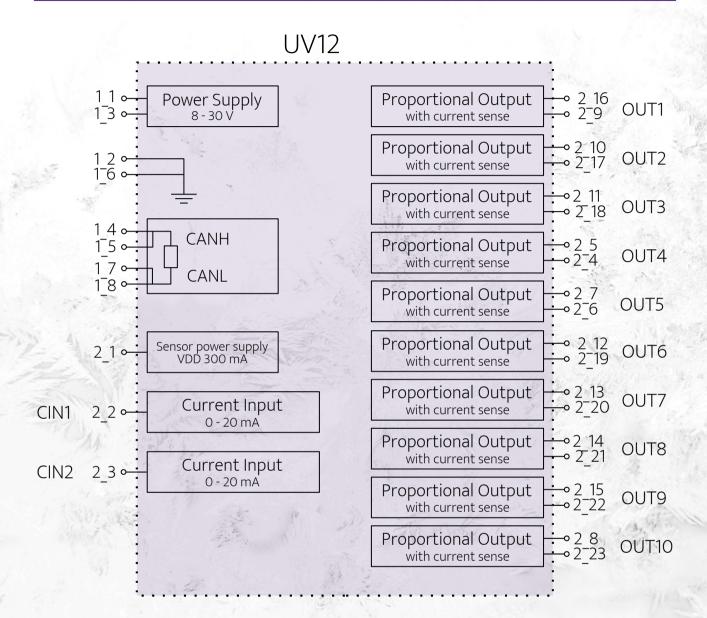


Technical Specifications

Voltage	8 - 30 VDC
Protection	Over voltage & Reverse voltage External 15 A fuse required
Weight	480 g
Current Consumption	Logic 20 mA
Connectors	AMPSEAL 8-pin 776286-2 AMPSEAL 23-pin 770680-1
Interface	1 x CAN-bus 2.0B
Material	Aluminum
Programming language	C, with open source uv_hal library
IP-rating	IP67
Microcontroller	32-bit ARM Cortex-M3
Memory	256 KB Application flash memory 36 kB RAM memory
Outputs	20 x proportional high-side PWM output with current sense
Output max current	2200 mA
Inputs	2 x current input 0 20 mA



System Diagram





Connector Pin Out

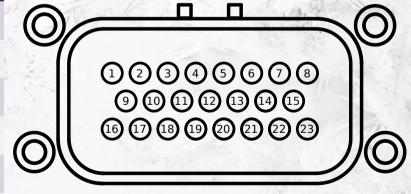
AMSPEAL 8-pin white connector

1 3776	
1	VDD
2	GND
3	VDD
4	CANH*
5	CANL*
6	GND
7	CANH*
8	CANL*



AMSPEAL 23-pin black connector

7 4434	
1	Sensor VDD Max 300 mA
2	CIN1
3	CIN2
4	OUT4_2
5	OUT4_1
6	OUT5_2
7	OUT5_1
8	OUT10_1



AMPSEAL 770680-1



^{*} CAN-bus multiplexed to 2 pins to simplify system wiring. It also has internal 120 Ω terminating resistor by default. Contact the manufacturer if the terminating resistor is not required.

	9	OUT1_2
	10	OUT2_1
	11	OUT3_1
	12	OUT6_1
	13	OUT7_1
	14	OUT8_1
	15	OUT9_1
	16	OUT1_1
	17	OUT2_2
	18	OUT3_2
×	19	OUT6_2
	20	OUT7_2
	21	OUT8_2
	22	OUT9_2
	23	OUT10_2



Physical Dimensions

