

Output Type:
PWM

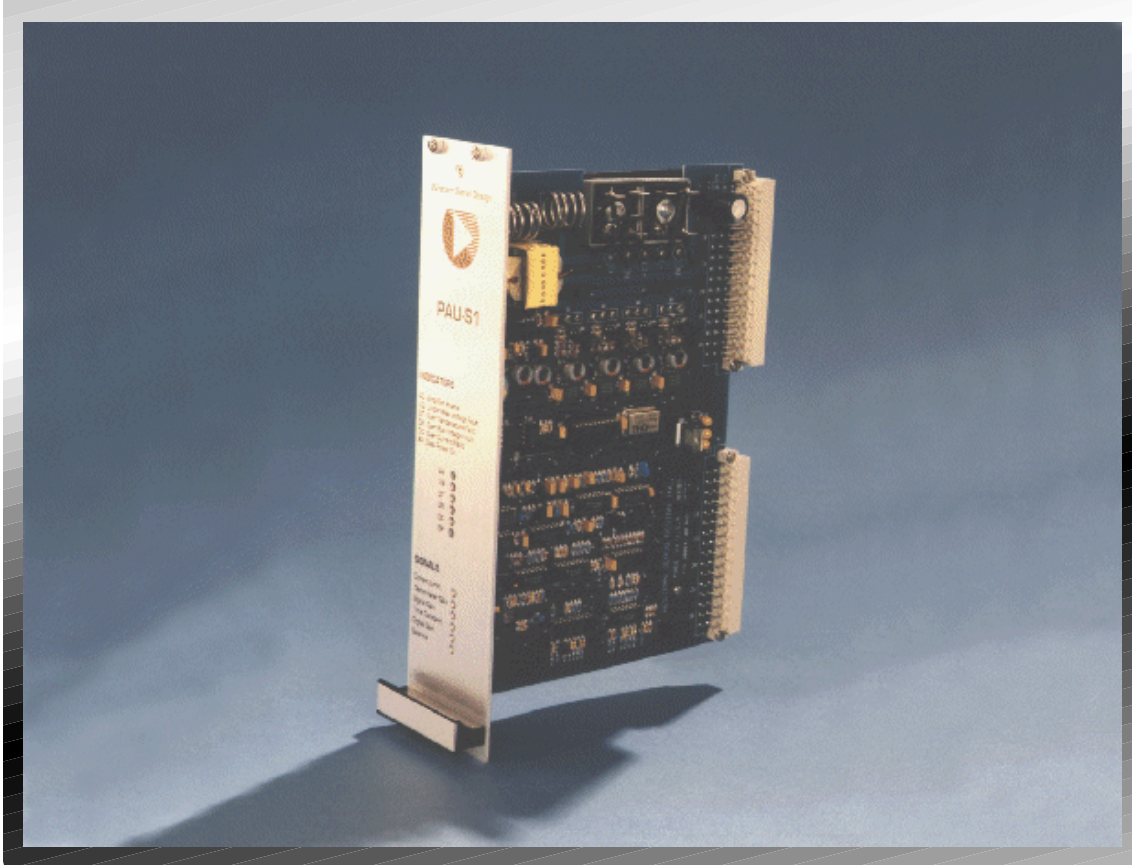
Voltage:
Up to 270 VDC

Amperage:
Up to 30 A Peak

Mounting:
6U Rack Mount

Modes:
Velocity or Torque

Command:
PWM Drive or $\pm 10V$



PAU-S1

High-Power Brush-Type PWM Servo Amplifier

The PAU-S1 is a high power, brush-type PWM servo amplifier in a 6U Eurocard form factor. Control can come from an analog ($\pm 10V$) command, or digital Magnitude and Direction signals. This multi-purpose amplifier contains both Velocity and Torque feedback loops. Inputs are provided to allow tachometer feedback in the Velocity Mode. The Torque Mode can be used for torque control applications, or in conjunction with a digital servo controller capable of computing Position and Velocity loop values. The Torque Mode can also be used for feedback in the Velocity Mode, with or without a position controller. The high switching frequency of the PAU-S1 allows the amplifier to drive very low inductance loads.

The PAU-S1 has Under Bias Voltage shutdown as well as Over Current, Over Voltage, and Over Temperature protection. Fault conditions are reported digitally to the controller connections, and indicated visually by front panel LEDs.

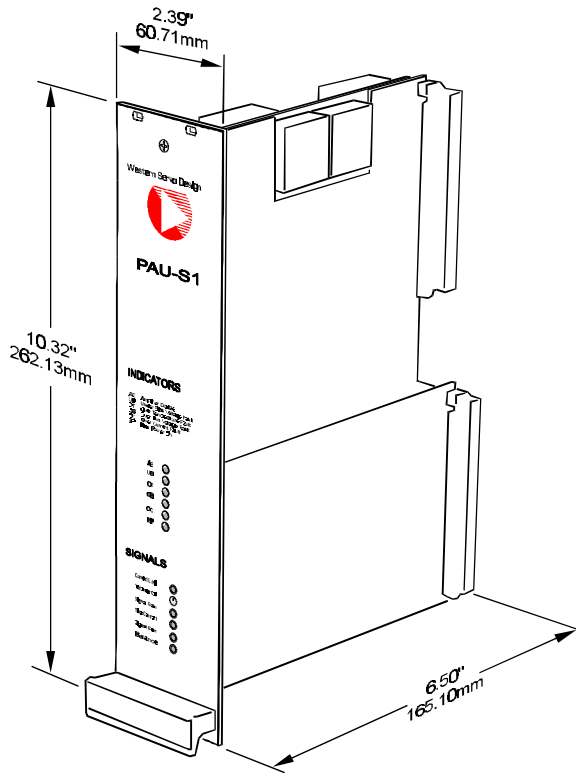
An optional backplane is available to allow quick and easy access to motor, power, control and other I/O signals. This greatly simplifies implementing the PAU-S1 in a motion control system.

- ◉ Eurocard 6U Form Factor
- ◉ Digital Control of PWM using Magnitude and Direction Signals
- ◉ Visual and Digital Fault Indicators
- ◉ Over Voltage, Over Current, Under Bias, and Over Temperature Protection
- ◉ Jumper Selectable Velocity or Torque Modes
- ◉ PWM Frequency: 20 or 80 kHz
- ◉ Full Isolation between Logic and Power Circuitry
- ◉ Continuous Current: 5, 7.5 or 15 Amperes
- ◉ High Bandwidth
- ◉ Bus Voltage: 100 - 270 VDC
- ◉ Advanced Design, High Quality and High Reliability at a Lower Cost

SPECIFICATIONS

Standard Models:	10/10	27/15	27/30
Bus Voltage	100 VDC	270 VDC	270 VDC
Peak Output Current*	10 A for 0.5 sec	15 A for 0.5 sec	30 A for 0.5 sec
Continuous Output Current*	5 A	7.5 A	15 A
Command Input Voltage	0 to ±10V	0 to ±10V	0 to ±10V
Command Input Impedance	20 kOhm	20 kOhm	20 kOhm
Switching Frequency	80 kHz	20 kHz	20 kHz
Minimum Load Inductance	0.1 mH	1 mH	1 mH
Torque Gain	1 A/V	1.5 A/V	3.0 A/V
Bandwidth	20 kHz	4 kHz	4 kHz
Weight	1.75 Lb (793.80 g)		
Recommended Chassis	CHU-S6 Eurocard		
Available Accessories	ACC-V1E Backplane, ACC-V2B Inductor Board, PSU-S1 Rack Mount Power Supply, ACC-V3A PMAC Interface Board		

*All ratings with forced air cooling to maintain 40°C heat sink temperature. Failure to keep constant air flow to the heat sink will reduce the output current capacity and may result in damage to the unit.



PINOUTS

J1: SIGNALS & BIAS POWER

ROW A

Pin	Function
2	+ Bias In (+12 to +15 VDC)
4	Ground
6	Current Monitor Out
8	Digital Direction Command In
10	Ground
12	No Connection
14	No Connection
16	Over Bus Voltage Fault Out
18	Over Current Fault Out
20	Amplifier Global Fault Out
22	Ground
24	+ Limit In
26	Amplifier Enable In
28	- Tachometer In
30	Ground
32	- Command In

ROW C

Pin	Function
2	- Bias In (-12 to -15 VDC)
4	Ground
6	PWM Opto power
8	Digital PWM Command In
10	Ground
12	No Connection
14	No Connection
16	Over Temperature Fault Out
18	Bias Under Voltage Fault Out
20	Amp PWM Clock Out
22	Ground
24	- Limit In
26	Ground
28	+ Tachometer In
30	No Connection
32	+ Command In

J2: MOTOR & BUS POWER

ROWS A, C & E

Pin	Function
2 - 6	Bus +V
8 - 12	Bus Ground
14 - 18	Motor Phase A
20 - 24	No Connection
26 - 30	Motor Phase B
32	No Connection

Consult the User's Manual for jumper settings and Backplane connections.

Ordering Information:

Product	Order Number
PAU-S1-10/10 Amp 100 VDC/10A Peak	WS-006-0004
PAU-S1-27/15 Amp 270 VDC/15A Peak	WS-006-0001
PAU-S1-27/30 Amp 270 VDC/30A Peak	WS-006-0002
ACC-V1E Backplane	WS-011-0004
ACC-V2B Inductor Board	WS-011-0006

Represented By: