

DC Strain Amplifier

MODEL : DSA-310



• Hand Carrier Type



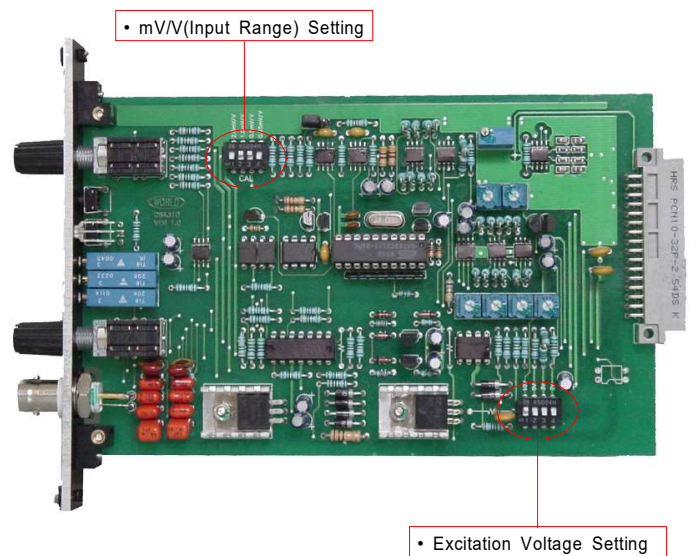
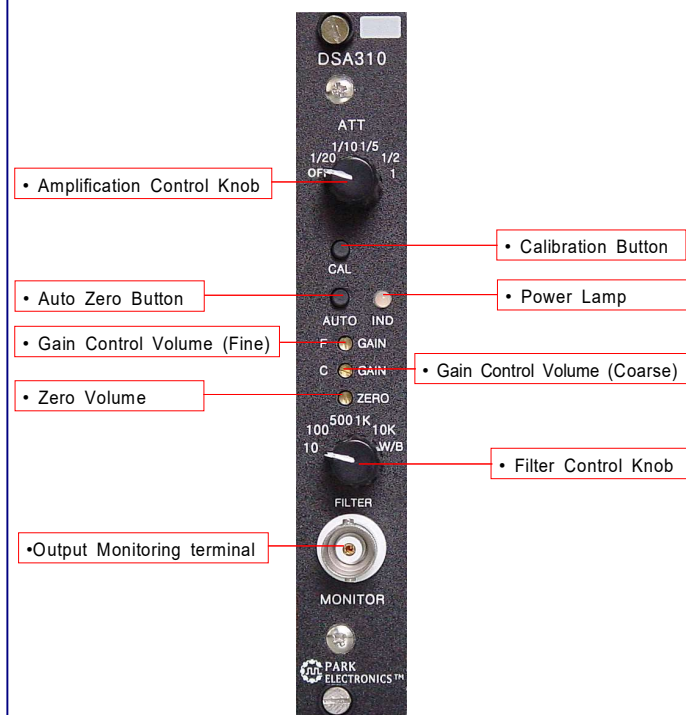
• Rack Mount Type



STANDARD SPECIFICATIONS

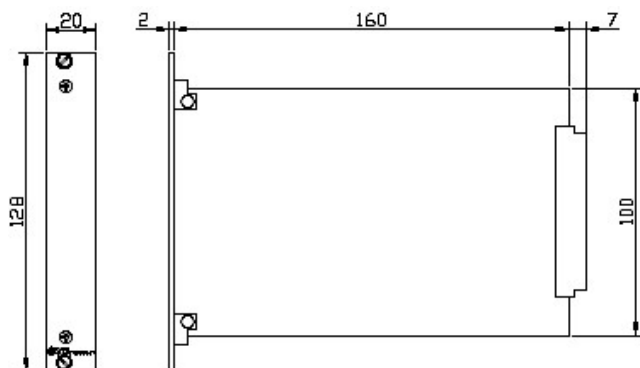
Balancing method	Electronic auto-balancing
Number of channels	1 channel/1 unit (multi-channel operation possible using housing case)
Gage resistance range	350Ω and 120Ω (option)
Gage factor	2,00
Input impedance	approx. 5MΩ +5MΩ (at DC)
Bridge excitation	DC constant voltage: 2, 3, 5, 10V Accuracy: ±0.1% Remote sensing circuit provided (Cable length: Up to approx. 600m)
Auto-balancing	Auto-balancing time: within 0.1 sec Residual voltage: ±0.1%/FS
Balance adjusting range	Approx. ±2% resistance (Approx. ±10000μm/m)
Sensitivity	Greater than 0.5V/100μm/m input (BV=2V) Greater than 2.5V/100μm/m input (BV=10V)
Output	OUTPUT: ±10V, OUTPUT impedance: 0.5Ω Capacitive load: Operable up to 0.1μF Option: OUTPUT: 4 to 20mA
Nonlinearity	Within ±0.01%/FS
Standard equivalent strain (CAL)	Minimum setup value: ±1 μm/m Accuracy: Within ±0.2%/FS (Find adjustment of internal calibration value possible)
Sensitivity control range (ATT)	1, 1/2, 1/5, 1/10, 1/20, OFF and continuously variable (VAR) from x1 to approx. x2.5
Frequency response	DC to 200kHz, +1dB, -3dB (with filter in W/B)
Low-pass filter	3-pole Bessel type, 10, 100, 500Hz, 1, 10kHz and W/B
Noise level	With ATT in 1, VAR fully CCW and BV in 2V (Referred to input): 60μm/m p-p at W/B, 15μm/m p-p from DC to 10kHz
Stability	With ATT in 1, VAR fully CCW, bridge resistance in 120Ω: • Zero drift: ±1μm/m/°C • Sensitivity change: ±0.01%/°C, ±0.05%/24 hours
Remote control function	Simultaneous auto-balancing on all channels
Common mode voltage	±7V DC or peak AC
Resistance to vibration	3G (29.4m/s ²)
Power supply	220 or 110VAC (Option), ±10% 50/60Hz, approx. 8VA
Bandwidth	1 kHz

● PANEL EXPLANATION

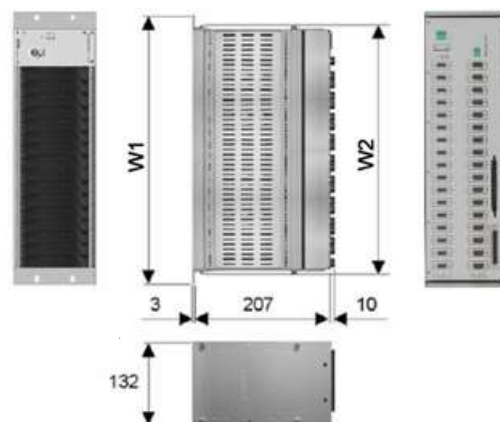


● DIMENSIONAL DRAWING

▶ Amplifier Dimension



▶ Sub Rack Dimension



Description	Model No	Width	
		W1	W2
4-channel case	3104	198	168
8-channel case	3108	280	248
16-channel case	3116	483	451