Appendix A: Specifications

Table 1: Physical Characteristics

Dimension	Measurement
Width	255 mm (10.0 in)
Height	145 mm (5.7 in)
Depth	335 mm (13.2 in)
Weight	11.5 kg (25.4 lb) PS280 9.0 kg (19.9 lb) PS283

Table 2: Environmental Characteristics

Characteristic	Temperature	Relative Humidity
Storage	–10° C to +70° C	70%
Operating	0° C to 40° C	80%

Table 3: Operational Characteristics

Characteristic	Measurement
Outputs	Two 0 to 30 VDC, one 5 VDC
Voltage (5 V)	5.0 ±0.25 VDC at 3.0 A maximum foldback current limited
Voltage (0–30 V)	0–30 constant VDC at 2.0 A constant, maximum (PS280) or 1.0 A constant. maximum (PS283)
Line Regulation (5 V)	≤5 mV
Line Regulation (CV)	≤0.01% +3 mV PS280 ≤0.01% + 5 mV PS283

Table 3: Operational Characteristics (Cont.)

Characteristic	Measurement
Line Regulation (CC)	≤0.2% +3 mA
Load Regulation (5 V)	≤0.2%
Load Regulation (CV)	≤0.01% +3 mV (rating current ≤3 A) ≤0.01% +5 mV (rating current >3 A) ≤300 mV (0–60 V single series tracking supply)
Load Regulation (CC)	≤0.2% +3 mA
Ripple/Noise (5 V)	≤2 mV rms
Ripple/Noise (CV)	≤1 mV rms, 5 Hz–1 MHz
Ripple (CC)	≤3 mA rms
Temperature Coefficient (CV)	≤300 ppm/° C
Recovery Time (CV)	≤100 µs (time to recover after a 50% load change with 0.5 A minimum)
Tracking Error (Slave)	≤0.5% +10 mV of the master supply
Indicator	Two 3 1/2 digit 0.5 in LED panel display meter
Meter Indicators	0–30 VDC +(0.5% of reading + 2 digits) 0–2 A +(0.5% of reading + 2 digits)
Insulation (Chassis-to-Terminal)	≥20 MΩ at DC 500 V
Insulation (Chassis-to-AC Cord))	≥30 MΩ at DC 500 V

Table 4: Electrical Characteristics

Characteristic	Measurement
Line voltage	90 to 110 108 to 132 198 to 242 216 to 250, all VAC at 50–60 Hz
Power consumption	386 VA, 300 W maximum (PS280) 265 VA, 200 W maximum (PS283)

Table 5: Certifications and Compliances

EC Declaration of Conformity – EMC	Meets intent of Directive 89/336/EEC for Electromagnetic Compatibility. Compliance was demonstrated to the following specifications as listed in the Official Journal of the European Communities: EN 55011 Class B Radiated and Conducted Emissions EN 50081-1 Emissions: EN 60555-2 AC Power Line Harmonic Emissions EN 50082-1 Immunity: IEC 801-2 Electrostatic Discharge Immunity IEC 801-3 RF Electromagnetic Field Immunity IEC 801-4 Electrical Fast Transient/Burst Immunity IEC 801-5 Power Line Surge Immunity
EC Declaration of Conformity – Low Voltage	Compliance was demonstrated to the following specification as listed in the Official Journal of the European Communities: Low Voltage Directive 73/23/EEC, amended by 93/68/EEC. HD401 S1 Safety Requirements for Electronic Measuring Aparatus.