

Constant Voltage Mode

CVL Range	0.000 ~ 10.00	V
CVL Program Resolution*2	2.778	mV
CVL Program Accuracy*2	0.10% ± 0.020	V
CVL Readback Resolution	2.778	mV
CVL Readback Accuracy	0.20% ± 0.020	V
CVL Slew Rate Range	0.0366 ~ 10.00	V/ms
Temperature Coefficient	100 ppm / °C of Rated Voltage	

Constant Current Mode

CCM Range	0.000 ~ 20.00	A
CCL Range	0.000 ~ 2.000	A
Minimum Voltage at Imax	0.000	V
Transient Time	50.00	us
CCM Program Resolution*2	5.556	mA
CCL Program Resolution*2	0.556	mA
CCM Program Accuracy*2	0.10% ± 0.020	A
CCL Program Accuracy*2	0.10% ± 0.020	A
CCM Readback Resolution	5.556	mA
CCL Readback Resolution	0.556	mA
CCM Readback Accuracy	0.20% ± 0.020	A
CCL Readback Accuracy	0.20% ± 0.020	A
CCM Slew Rate Range	0.00146 ~ 0.400	A/us
CCL Slew Rate Range	0.000146 ~ 0.040	A/us
Temperature Coefficient	100 ppm / °C of Rated Current	

External Mode

Analog Program	0~10 Volts Input yields 0~selected full scaled loading in CC mode		
Accuracy	Same As Internal ± 0.1% Rating		
Input Impedance	147 kΩ	±	2 %
Monitor output Signal	0~10 Volts output for 0~full scaled current		
VMON Accuracy	0.10%	±	0.020 V
IMON Accuracy	0.10%	±	0.020 A

Programmable Protection

Power(OPP)		
Range	0.278 ~ 110.0	W
Resolution	0.028	W
Accuracy	1.00% ± 0.556	W
Voltage(OVP)		
Range	0.028 ~ 11.00	V
Resolution	2.778	mV
Accuracy	0.20% ± 0.028	V
Current(OCP)		
Range	0.056 ~ 22.00	A
Resolution	5.556	mA
Accuracy	0.20% ± 0.056	A

Constant Power Mode

CPM Range	0.000 ~ 100.0	W
CPL Range	0.000 ~ 10.00	W
	@ lin ≤ 2.000	A
CPM Resolution*2	0.028	W
CPL Resolution*2	0.0028	W
CPM Accuracy*2	1.0% ± 0.056	+
	0.042 × 5.000 — Vin	W
CPL Accuracy*2	1.0% ± 0.011	+
	0.008 × 5.000 — Vin	W
CPM / L Slew Rate Range	Same As CC Mode	
Temperature Coefficient	300 ppm / °C of Rated Power	

Constant Resistance Mode

CRH Range	5.000 ~ 1,000	Ω
	@ lin ≤ 2.000	A
CRM Range	0.5000 ~ 5.000	Ω
CRL Range	0.0200 ~ 0.5000	Ω
CRH Resolution*2	0.067	mS
CRM Resolution*2	0.667	mS
CRL Resolution*2	0.167	mΩ
CRH Accuracy*2	1.00% ± 1.600	mS
	@lin > 0.020	A
	& Vin > 2.500	V
CRM Accuracy*2	1.00% ± 4.000	mS
	@lin > 0.200	A
	& Vin > 1.000	V
CRL Accuracy*2	1.00% ± 1.000	mΩ
	@lin > 2.000	A
	& Vin > 0.010	V
CRM / CRH Slew Rate Range	Same As CC Mode	
CRL Slew Rate Range	Same As CV Mode	
CRM / H Temperature Coefficient	300 ppm / °C of Minimum Resistance	
CRL Temperature Coefficient	300 ppm / °C of Maximum Resistance	

General

Transient Mode		
Frequency Range	0.100 ~ 20,000	Hz
Accuracy	0.2%	
Duty Range	1.000 ~ 99.0	%
Accuracy	0.2%	
Transient Time Accuracy	15.0% ± 50% of Minimum Time	
Remote Interface	GPIO / RS-232	
Derating for higher temperatures	(-)2.25% Rated Power / °C	
AC Input	115 / 230 Vac 50 / 60 Hz	
Operating Temperature	5 °C ~ 40 °C	
Dimension	21.85"(L)x8.57"(W)x7.57"(H)	

*1 All Mode Specification measure by 25 °C room temperature unless otherwise specified

*2 Transient Mode Specification must be x2

AMREL reserves the right to change limits, test conditions, and dimensions without notice



ZVL100-10-20L (10V,20A,100W) OPERATIONAL CURVE

