

ODP8000 Series Programmable DC

Power Supply Technical Specifications

The specifications below are based on the instrument having run for at least 30 minutes continuously under the specified operating temperature.

ODP8353 Parameter

Parameter		Description	
Output Ratings (0°C-40°C)		Voltage/ Current	CH1: 32V/5A, Maximum 102W constant power output CH2: 32V/5A, Maximum 102W constant power output CH3: 24V/3A, Maximum 24W constant power output
	CH1,CH2 Parallel	Voltage/ Current	64V/5A, Maximum 204W constant power output
	CH1,CH2 Series	Voltage/ Current	32V/10A, Maximum 204W constant power output
Channel		3	
Load Regulation	Independent	Voltage	$\leq 0.01\% + 5\text{mV}$
	Parallel	Voltage	$\leq 0.01\% + 50\text{mV}$
	Series	Voltage	$\leq 0.01\% + 50\text{mV}$
Voltage Regulation	Independent	Voltage	$\leq 0.01\% + 3\text{mV}$
		Current	$\leq 0.01\% + 3\text{mA}$
	Parallel	Voltage	$\leq 0.01\% + 3\text{mV}$

	Series	Current	$\leq 0.01\% + 3\text{mA}$
		Voltage	$\leq 0.01\% + 3\text{mV}$
		Current	$\leq 0.01\% + 3\text{mA}$
Settings Resolution	Independent	Voltage	1mV
		Current	1mA
	Parallel	Voltage	1mV
		Current	1mA
	Series	Voltage	1mV
		Current	1mA
Read Back Resolution	Independent	Voltage	1mV
		Current	1mA
	Parallel	Voltage	1mV
		Current	1mA
	Series	Voltage	1mV
		Current	1mA
Settings Accuracy (Within 12 months) (25°C ± 5°C)	Independent	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
	Parallel	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.2\% \text{ of reading} + 20)\text{mA}$
	Series	Voltage	$\pm(0.06\% \text{ of reading} + 20)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
Read Back Accuracy (25°C ± 5°C)	Independent	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
	Parallel	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.2\% \text{ of reading} + 10)\text{mA}$
	Series	Voltage	$\pm(0.06\% \text{ of reading} + 20)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
Noise and Ripple	Independent	Voltage(Vp-p)	$\leq 5\text{mVp-p}$
		Voltage(rms)	$\leq 1\text{mVrms}$

(20Hz-20MHz)		Current(rms)	≤5mA _{rms}
	Parallel	Voltage(V _{p-p})	≤5mV _{p-p}
		Voltage(rms)	≤1mV _{rms}
		Current(rms)	≤10mA _{rms}
	Series	Voltage(V _{p-p})	≤10mV _{p-p}
		Voltage(rms)	≤1mV _{rms}
		Current(rms)	≤5mA _{rms}
Temperature Coefficient	Independent	Voltage	100ppm/°C
		Current	200ppm/°C
	Parallel	Voltage	100ppm/°C
		Current	200ppm/°C
	Series	Voltage	100ppm/°C
		Current	200ppm/°C
Programmable output		Storage	1M points
		Groups saved in internal memory	100 groups
		Time setting	Second
Remote Compensation Voltage (Two-wire)		≤1V	
Data Record Function		10k groups of data (voltage, current)	
Ports		USB Host, USB Device, RS232, LAN, supports USB TMC protocol	

ODP8354 Parameter

Parameter		Description	
Output Ratings (0°C-40°C)		Voltage/ Current	CH1: 32V/5A, Maximum 102W constant power output CH2: 32V/5A, Maximum 102W constant power output CH3: 24V/3A, Maximum 24W constant power output CH4: 24V/3A, Maximum 24W constant power output
		CH1,CH2 Parallel Voltage/ Current	64V/5A, Maximum 204W constant power output
		CH1,CH2 Series Voltage/ Current	32V/10A, Maximum 204W constant power output
Channel		4	
Load Regulation	Indepe ndent	Voltage	$\leq 0.01\% + 5\text{mV}$
	Parallel	Voltage	$\leq 0.01\% + 50\text{mV}$
	Series	Voltage	$\leq 0.01\% + 50\text{mV}$
Voltage Regulation	Indepe ndent	Voltage	$\leq 0.01\% + 3\text{mV}$
		Current	$\leq 0.01\% + 3\text{mA}$
	Parallel	Voltage	$\leq 0.01\% + 3\text{mV}$
		Current	$\leq 0.01\% + 3\text{mA}$
	Series	Voltage	$\leq 0.01\% + 3\text{mV}$

		Current	$\leq 0.01\% + 3\text{mA}$
Settings Resolution	Independent	Voltage	1mV
		Current	1mA
	Parallel	Voltage	1mV
		Current	1mA
	Series	Voltage	1mV
		Current	1mA
Read Back Resolution	Independent	Voltage	1mV
		Current	1mA
	Parallel	Voltage	1mV
		Current	1mA
	Series	Voltage	1mV
		Current	1mA
Settings Accuracy (Within 12 months) (25°C ± 5°C)	Independent	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
	Parallel	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.2\% \text{ of reading} + 20)\text{mA}$
	Series	Voltage	$\pm(0.06\% \text{ of reading} + 20)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
Read Back Accuracy (25°C ± 5°C)	Independent	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
	Parallel	Voltage	$\pm(0.03\% \text{ of reading} + 10)\text{mV}$
		Current	$\pm(0.2\% \text{ of reading} + 10)\text{mA}$
	Series	Voltage	$\pm(0.06\% \text{ of reading} + 20)\text{mV}$
		Current	$\pm(0.1\% \text{ of reading} + 5)\text{mA}$
Noise and Ripple (20Hz-20MHz)	Independent	Voltage(Vp-p)	$\leq 5\text{mVp-p}$
		Voltage(rms)	$\leq 1\text{mVrms}$
		Current(rms)	$\leq 5\text{mA rms}$
	Parallel	Voltage(Vp-p)	$\leq 5\text{mVp-p}$

		Voltage(rms)	≤1mVrms
		Current(rms)	≤10mArms
	Series	Voltage(Vp-p)	≤10mVp-p
		Voltage(rms)	≤1mVrms
		Current(rms)	≤5mArms
Temperature Coefficient	Independent	Voltage	100ppm/°C
		Current	200ppm/°C
	Parallel	Voltage	100ppm/°C
		Current	200ppm/°C
	Series	Voltage	100ppm/°C
		Current	200ppm/°C
Programmable output		Storage	1M points
		Groups saved in internal memory	100 groups
		Time setting	Second
Remote Compensation Voltage (Two-wire)		≤1V	
Data Record Function		10k groups of data (voltage, current)	
Ports		USB Host, USB Device, RS232, LAN, Support USB TMC	

General Parameter

Display

Characteristics	Description
Display Type	4.3 inch colored LCD (Liquid Crystal Display)
Display Resolution	480 (Horizontal) × 3(RGB) × 272 (Vertical) Pixels
Display Colors	16.7M colors, IPS

Power Supply

Characteristics	Description		
Supply	110 VAC $\pm$ 10% or 220 VAC $\pm$ 10%; AC input 50/60Hz		
Fuse	ODP8353	110 V	250 V, F5A
		220 V	250 V, F3A
	ODP8354	110 V	250 V, F5A
		220 V	250 V, F3A

Environment

Characteristics	Description
Temperature	Working temperature: 0°C ~ 40°C Storage temperature: -20°C ~ 60°C
Relative Humidity	$\leq$ 90%
Height	Operating: 3,000 m Non-operating: 15,000 m
Cooling Method	Fan cooling

Mechanical Specifications

Characteristics	Description	
Dimension	212mm(W)*130mm(H)*290mm(D)	
Weight	ODP8353	Approx. 9 kg
	ODP8354	Approx. 9 kg

Interval Period of Adjustment:

One year is recommended for the calibration interval period.



V1.0.1