

## Mini Digital Power System

MDP (Mini Digital Power System) is a system of programmable linear DC power supply based on modular design, capable of connecting different modules for use as needed.

Current Functional Modules: Display Control Module、 Digital Power Module

Modules in Develop: Digital Signal Genetator Module、 Electronic Load Module、 Power Charger Module、 Battery Pack Module



MDP-XP consists of a display control module and a digital power module. Through 2.4G wireless connection, it achieves multichannel free combination at the power of 90W per channel. MDP-XP is a high cost-effective programmable linear DC power supply, featuring indicators, stability, reliability and distinct user interface comparable with professional power supplies; it also provides programmable output, timing output, sequential control, automatic compensation and other powerful

functions, so as to meet diversified testing needs.

**Display Control Module:** equipped with a 2.8-inch TFT screen, it can display the voltage-current waveform in real time, support data statistics, and automatically pair with and control six sub-modules (digital power modules), with dual thumb wheels and 90-degree scrolling user-friendly design.

**Digital Power Module:** high efficiency linear output, 0.25mV ripple wave, high-speed transient response, and supporting precise fine-tuning.

※Product Characteristics:

2.4G wireless connection, supporting a Display Control as well as six Digital Powers

DC wide voltage input between 4.2V and 30V, reduced up to 2.7V after startup

High-speed transient response and over current protection, as fast as 4uS

Extremely low load regulation and intelligent line loss compensation

High efficiency and natural heat dissipation with 90W of capacity load

Support positive & negative pressure, series pressurization, parallel current sharing,

free combination of collaborative load, and intelligent power allocation

**Security Protections:** input overvoltage, under-voltage protection, anti-reverse

connection protection, anti-backflow protection, overtemperature protection, and

over current protection

※ ※Applications:

Universal tests and teaching experiments in R&D laboratory

Maintenance of cellphones, laptops and other digital products

Power supply testing and data logger of RF and microwave circuits or modules

Supply purified power for high-accuracy digital-analog hybrid circuits and Hi-Fi audio devices

Property verification and fault diagnosis of devices and circuits

Quality control and quality inspection

Emergency power supply for model airplanes and vehicles

※ Specifications :

Mode	MDP-XP
Input	DC4.2V-30V(After startup 2.7V),100mA-6A,Support QC3.0
Output	30V/5A,90W
Adjustment rate	Load adjustment rate $< \pm 0.01\%$
	Power adjustment rate $< \pm 0.01\%$
Ripple and noise	250uVrms/3mVpp
Transient response time	$\leq 4\mu\text{s}$
Line loss compensation range	5mR-100mR
Protection	Input over-voltage、under-voltage、 anti-reverse、 output anti-backflow、 over temperature
Data record	Max storage: 7MB, Max recording time: 24 hours.

Others	Automatically shut down and enter micro-power mode		
	Support USB firmware upgrade		
	Support user calibration		
Specification		Size	Weight
	MDP-M01	101.5x64x12mm	133g
	MDP-P905	107x66x13.6mm	143g