



ITECH

AC Source and Load Selection Guide

YOUR POWER
TESTING SOLUTION



Grid Simulator



Series	Output voltage V L-N	Output power	Output modes	Phase	Frequency	Communication
IT7900 HV	700V/1050V	90kVA to 900kVA	AC,AC+DC	3 Φ	16-100Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT7900	350V	3kVA to 165kVA.....960kVA	AC,DC,AC+DC, DC+AC	1 Φ ,3 Φ , reversed phase	16-150Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT7900E	350V	21kVA to 231kVA.....1MVA+	AC,DC,AC+DC, DC+AC	1 Φ ,3 Φ , reversed phase	16-150Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT7900P	350V	3kVA to 165kVA.....960kVA	AC,DC,AC+DC, DC+AC	1 Φ ,3 Φ , reversed phase	16-2400Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT7900EP	350V	21kVA to 231kVA.....1MVA+	AC,DC,AC+DC, DC+AC	1 Φ ,3 Φ , reversed phase	16-2400Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232

Source-Load All-in-1, 21kVA in 3U

IT7900EP series High Performance Regenerative Grid Simulator

- Up to 21 kVA for 3U
- Highly efficient power regeneration
- Power output up to 1MVA after master-slave parallel connection
- Regenerative grid simulator & full 4-Quadrant AC&DC power sources
- Power Amplifier function for PHIL applications
- Regenerative full 4-Quadrant AC&DC load
- Compliance tests incl. LVRT /Phase Jump/Frequency variation/harmonic injection
- Build-in waveforms IEC61000-4-11/4-13/4-14/4-17/4-28/4-29/3-2/3-12
- CE Mode: Simulation of 14 Circuit Topologies Including Single-Phase Rectifier RLC and Parallel RLC
- Phase Shift Function (-180° to +180°) *1

*1 After turning on the rectification function, the setting range of the phase shift is restricted by the crest factor

IT7900EP=IT7800E+IT7900E+IT8200E



Model	Output voltage Vac		Output current Aac		Output power Pac	Phase	Height
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)			
IT7921EP-350-105	350V	606V	105A	35A	21kVA	1Φ,3Φ,reversed phase	3U
IT7942EP-350-210	350V	606V	210A	70A	42kVA	1Φ,3Φ,reversed phase	6U
IT7963EP-350-315	350V	606V	315A	105A	63kVA	1Φ,3Φ,reversed phase	15U
IT7984EP-350-420	350V	606V	420A	140A	84kVA	1Φ,3Φ,reversed phase	27U
IT79105EP-350-525	350V	606V	525A	175A	105kVA	1Φ,3Φ,reversed phase	27U
IT79126EP-350-630	350V	606V	630A	210A	126kVA	1Φ,3Φ,reversed phase	27U
IT79147EP-350-735	350V	606V	735A	245A	147kVA	1Φ,3Φ,reversed phase	27U
IT79168EP-350-840	350V	606V	840A	280A	168kVA	1Φ,3Φ,reversed phase	37U
IT79189EP-350-945	350V	606V	945A	315A	189kVA	1Φ,3Φ,reversed phase	37U
IT79210EP-350-1050	350V	606V	1050A	350A	210kVA	1Φ,3Φ,reversed phase	37U
IT79231EP-350-1155	350V	606V	1155A	385A	231kVA	1Φ,3Φ,reversed phase	37U

$$IT7900P = IT7800 + IT7900 + IT8200$$

All-in-1 Regenerative AC&DC

IT7900P series High Performance Regenerative Grid Simulator



- 3U up to 15kVA
- Highly efficient power regeneration
- Power output up to 960kVA after master-slave parallel connection
- Regenerative grid simulator with full four-quadrant AC/DC source and load functionality
- Power amplifier function for PHIL applications
- Regenerative full 4-quadrant AC&DC load
- Multi-channel function, single unit can test 1-3 DUTs at the same time*1
- Frequency lock and phase lock function to achieve 6 phase & 12 phase power output
- Compliance tests incl. LVRT /Phase Jump/Frequency variation/ harmonic injection
- CE Mode: simulation of 14 circuit topologies Including single-phase rectifier RLC and parallel RLC
- Phase shift function (-180° to +180°) *2
- Build-in waveforms IEC61000-4-11/4-13/4-14/4-17/4-28/4-29/3-2/3-12
- Provide rich trigger configuration

*1 Not available for single-phase models

*2 After turning on the rectification function, the setting range of the phase shift is restricted by the crest factor

Model	Output voltage Vac		Output current Aac		Output power Pac	Phase	Height
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)			
IT7905P-350-30U	350V	—	30A	—	5kVA	1Φ	3U
IT7906P-350-90	350V	606V	90A	30A	6kVA	1Φ,3Φ,reversed phase	3U
IT7909P-350-90	350V	606V	90A	30A	9kVA	1Φ,3Φ,reversed phase	3U
IT7912P-350-90	350V	606V	90A	30A	12kVA	1Φ,3Φ,reversed phase	3U
IT7915P-350-90	350V	606V	90A	30A	15kVA	1Φ,3Φ,reversed phase	3U
IT7930P-350-180	350V	606V	180A	60A	30kVA	1Φ,3Φ,reversed phase	6U
IT7945P-350-270	350V	606V	270A	90A	45kVA	1Φ,3Φ,reversed phase	15U
IT7960P-350-360	350V	606V	360A	120A	60kVA	1Φ,3Φ,reversed phase	27U
IT7975P-350-450	350V	606V	450A	150A	75kVA	1Φ,3Φ,reversed phase	27U
IT7990P-350-540	350V	606V	540A	180A	90kVA	1Φ,3Φ,reversed phase	27U
IT79105P-350-630	350V	606V	630A	210A	105kVA	1Φ,3Φ,reversed phase	27U
IT79120P-350-720	350V	606V	720A	240A	120kVA	1Φ,3Φ,reversed phase	37U
IT79135P-350-810	350V	606V	810A	270A	135kVA	1Φ,3Φ,reversed phase	37U
IT79150P-350-900	350V	606V	900A	300A	150kVA	1Φ,3Φ,reversed phase	37U
IT79165P-350-990	350V	606V	990A	330A	165kVA	1Φ,3Φ,reversed phase	37U

Grid Simulator

IT7900E series Regenerative Grid Simulator



- 3U up to 21kVA
 - Power output up to 1MVA after master-slave parallel connection
 - Regenerative grid simulator & full 4-Quadrant AC&DC power sources
 - Power amplifier function for PHIL applications
 - Three working modes: CV/CC/CP
 - Harmonics and interharmonics waveform synthesizer
 - AC, DC, AC+DC or DC+AC output capability
 - Programmable output impedance
 - Compliance tests incl LVRT /Phase Jump/Frequency variation/Harmonic Injection
 - Build-in waveforms IEC61000-4-11/4-13/4-14/4-17/4-28/4-29/3-2/3-12
 - Power line disturbance simulation testing by LIST programming/SWEEP/Surge&Sag functions
 - Up to 50th harmonic simulation and analysis function is included*1
- *1 Voltage/current harmonic analysis

Model	Output voltage Vac		Output current Aac		Output power Pac	Phase	Height
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)			
IT7921E-350-105	350V	606V	105A	35A	21kVA	1Φ,3Φ,reversed phase	3U
IT7942E-350-210	350V	606V	210A	70A	42kVA	1Φ,3Φ,reversed phase	6U
IT7963E-350-315	350V	606V	315A	105A	63kVA	1Φ,3Φ,reversed phase	15U
IT7984E-350-420	350V	606V	420A	140A	84kVA	1Φ,3Φ,reversed phase	27U
IT79105E-350-525	350V	606V	525A	175A	105kVA	1Φ,3Φ,reversed phase	27U
IT79126E-350-630	350V	606V	630A	210A	126kVA	1Φ,3Φ,reversed phase	27U
IT79147E-350-735	350V	606V	735A	245A	147kVA	1Φ,3Φ,reversed phase	27U
IT79168E-350-840	350V	606V	840A	280A	168kVA	1Φ,3Φ,reversed phase	37U
IT79189E-350-945	350V	606V	945A	315A	189kVA	1Φ,3Φ,reversed phase	37U
IT79210E-350-1050	350V	606V	1050A	350A	210kVA	1Φ,3Φ,reversed phase	37U
IT79231E-350-1155	350V	606V	1155A	385A	231kVA	1Φ,3Φ,reversed phase	37U

Grid Simulator

IT7900 series Regenerative Grid Simulator



- 6kVA in 1U/2U,15kVA in 3U
- Regenerative grid simulator & full 4-Quadrant AC&DC power sources
- Power amplifier function for PHIL test
- Professional anti-islanding test mode*1
- Comprehensive working modes selectable: single-phase,three-phase, reversed phase and multi-channel*2
- Build-in waveforms IEC61000-4-11/4-13/4-14/4-17/4-28/4-29/3-2/3-12
- Current source mode
- Harmonics and interharmonics waveform synthesizer
- Provide rich trigger configuration
- Frequency lock and phase lock function to achieve 6 phase & 12 phase power output

*1 Not available for multi-channel function

*2 <6kVA models only support single-phase function

Model	Output voltage Vac		Output current Aac		Output power Pac	Phase	Height	Front panel
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)				
IT7902-350-10U-ATE	350V	—	10A	—	2kVA	1Φ	1U	—
IT7902-350-10U	350V	—	10A	—	2kVA	1Φ	2U	touch screen
IT7904-350-20U-ATE	350V	—	20A	—	4kVA	1Φ,reversed phase	1U	—
IT7904-350-20U	350V	—	20A	—	4kVA	1Φ,reversed phase	2U	touch screen
IT7905-350-30U	350V	—	30A	—	5kVA	1Φ	3U	touch screen
IT7906-350-30-ATE	350V	606V	30A	10A	6kVA	1Φ,3Φ,reversed phase	1U	—
IT7906-350-30	350 V	606V	30A	10A	6kVA	1Φ,3Φ,reversed phase	2U	touch screen
IT7906-350-90	350 V	606V	90A	30A	6kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7909-350-90	350 V	606V	90A	30A	9kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7912-350-90	350 V	606V	90A	30A	12kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7915-350-90	350 V	606V	90A	30A	15kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7930-350-180	350 V	606V	180A	60A	30kVA	1Φ,3Φ,reversed phase	6U	touch screen
IT7945-350-270	350 V	606V	270A	90A	45kVA	1Φ,3Φ,reversed phase	15U	touch screen
IT7960-350-360	350 V	606V	360A	120A	60kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT7975-350-450	350 V	606V	450A	150A	75kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT7990-350-540	350 V	606V	540A	180A	90kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT79105-350-630	350 V	606V	630A	210A	105kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT79120-350-720	350 V	606V	720A	240A	120kVA	1Φ,3Φ,reversed phase	37U	touch screen
IT79135-350-810	350 V	606V	810A	270A	135kVA	1Φ,3Φ,reversed phase	37U	touch screen
IT79150-350-900	350 V	606V	900A	300A	150kVA	1Φ,3Φ,reversed phase	37U	touch screen
IT79165-350-990	350 V	606V	990A	330A	165kVA	1Φ,3Φ,reversed phase	37U	touch screen

High Voltage Grid Simulator

IT7900 series Regenerative Grid Simulator (HV)

- Voltage up to 700 VL-N, 1050 VL-N
- 16Hz~100Hz
- Used as regenerative grid simulator, four-quadrant source
- CV/Current Limit/Power Limit
- AC, AC+DC output capability
- Three-phase output capability
- Programmable output impedance, power impedance simulation
- LVRT /Phase Jump/Frequency variation /Harmonic Injection
- Harmonic and interharmonic waveform synthesis
- LIST/SWEEP simulate grid disturbances
- Voltage and current harmonics measurement, up to 50 times*1
- Relay Ctrl output for electrical isolation between DUT and grid simulator
- Built-in USB/CAN/LAN/LXI compliant LAN interface/DigitalIO, optional GPIB /RS232



*1 Voltage and current harmonic analysis, Voltage harmonic simulation

Model	Output voltage Vac		Output current Aac	Output power Pac	Phase	Height
	V L-N	V L-L	Arms(3Φ)			
IT7990-700-90	700V	1200V	90A	90kVA	3Φ	27U
IT79180-700-180	700V	1200V	180A	180kVA	3Φ	27U*2
IT79270-700-270	700V	1200V	270A	270kVA	3Φ	27U*3
IT79360-700-360	700V	1200V	360A	360kVA	3Φ	27U*4
IT79450-700-450	700V	1200V	450A	450kVA	3Φ	27U*5
IT79540-700-540	700V	1200V	540A	540kVA	3Φ	27U*6
IT79630-700-630	700V	1200V	630A	630kVA	3Φ	27U*7
IT79720-700-720	700V	1200V	720A	720kVA	3Φ	27U*8
IT79810-700-810	700V	1200V	810A	810kVA	3Φ	27U*9
IT79900-700-900	700V	1200V	900A	900kVA	3Φ	27U*10
IT79135-1050-90	1050V	1818V	90A	135kVA	3Φ	37U
IT79270-1050-180	1050V	1818V	180A	270kVA	3Φ	37U*2
IT79405-1050-270	1050V	1818V	270A	405kVA	3Φ	37U*3
IT79540-1050-360	1050V	1818V	360A	540kVA	3Φ	37U*4
IT79675-1050-450	1050V	1818V	450A	675kVA	3Φ	37U*5
IT79810-1050-540	1050V	1818V	540A	810kVA	3Φ	37U*6

Programmable AC Power Supply



Model	Output voltage V L-N	Output power	Output modes	Phase	Frequency	Communication
IT7800	350V	3kVA to 165kVA.....960kVA	AC,DC,AC+DC, DC+AC	1 Φ ,3 Φ , reversed phase	16-2400Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT7800E	350V	21kVA to 231kVA.....1MVA+	AC,DC,AC+DC, DC+AC	1 Φ ,3 Φ , reversed phase	16-2400Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT7800 HV	700V/1050V	90kVA to 900kVA	AC,AC+DC	3 Φ	16-100Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT7600	300V	750VA to 3kVA	AC,DC,AC+DC	1 Φ	10-5000Hz	USB,RS232,LAN,CAN
IT-M7700	300V/600V	300VA to 1500VA	AC,DC,AC+DC	1 Φ	45Hz-1000Hz	USB,LAN optional GPIB,CAN,Analog&RS-232
IT7200	300V	300VA,600VA	AC,DC,AC+DC	1 Φ	45Hz-500Hz	USB,LAN
IT7300	300V	300VA to 9000VA	AC	1 Φ or 3 Φ	45Hz-500Hz	USB,LAN,RS-232

High Power Programmable AC/DC Power Supply

IT7800E series

High power programmable AC/DC power supply



- 3U up to 21kVA
- Power output up to 1MVA after master-slave parallel connection
- Up to 50th harmonic simulation and analysis*1
- Output frequency: 16-2400Hz
- Built-in single/3-phase AC power meter
- 4 output modes: AC/DC/AC+DC/DC+AC
- Harmonics, inter-harmonics waveform synthesizer
- Programmable output impedance
- High current crest factor, suitable for inrush current testing*2
- Simulate arbitrary waveform output, support csv. file import
- List mode simulates the power supply reproduction function to realize the simulation function of instantaneous power interruption
- Surge/Sag function
- Build-in waveforms IEC61000-4-11/4-13/4-14/4-17/4-28/4-29/3-2/3-12
- Optional specialized APS4000 aerospace power system simulation software

*1 Voltage and current harmonic analysis / Voltage harmonic simulation

*2 Maximum CF is up to 6 within peak current range

Model	Output voltage Vac		Output current Aac		Output power Pac	Phase	Height
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)			
IT7821E-350-105	350V	606V	105A	35A	21kVA	1Φ,3Φ,reversed phase	3U
IT7842E-350-210	350V	606V	210A	70A	42kVA	1Φ,3Φ,reversed phase	6U
IT7863E-350-315	350V	606V	315A	105A	63kVA	1Φ,3Φ,reversed phase	15U
IT7884E-350-420	350V	606V	420A	140A	84kVA	1Φ,3Φ,reversed phase	27U
IT78105E-350-525	350V	606V	525A	175A	105kVA	1Φ,3Φ,reversed phase	27U
IT78126E-350-630	350V	606V	630A	210A	126kVA	1Φ,3Φ,reversed phase	27U
IT78147E-350-735	350V	606V	735A	245A	147kVA	1Φ,3Φ,reversed phase	27U
IT78168E-350-840	350V	606V	840A	280A	168kVA	1Φ,3Φ,reversed phase	37U
IT78189E-350-945	350V	606V	945A	315A	189kVA	1Φ,3Φ,reversed phase	37U
IT78210E-350-1050	350V	606V	1050A	350A	210kVA	1Φ,3Φ,reversed phase	37U
IT78231E-350-1155	350V	606V	1155A	385A	231kVA	1Φ,3Φ,reversed phase	37U

High Power Programmable AC Power Supply

IT7800 series High power programmable AC/DC power supply



- 3U up to 15kVA, 1U/2U up to 6KVA
- Multi-channel function, single unit can connect/test up to 3 DUTs *1
- Output frequency: 16-2400Hz
- 4 output modes: AC/DC/AC+DC/DC+AC
- Harmonics, inter-harmonics waveform synthesizer
- Current source mode
- Provide rich trigger configuration
- Frequency lock and phase lock function to achieve 6 phase & 12 phase power output
- Supported regulatory testing include IEC61000-4-11/4-13/4-14/4-17/4-28/4-29/3-2/3-12
- Optional specialized APS4000 aerospace power system simulation software

*1 This feature is not available on single-phase models.

Model	Output voltage Vac		Output current Aac		Output power Pac	Phase	Height	Front panel
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)				
IT7802-350-10U-ATE	350V	—	10A	—	2kVA	1Φ	1U	—
IT7802-350-10U	350V	—	10A	—	2kVA	1Φ	2U	touch screen
IT7802-350-30-ATE	350V	606V	30A	10A	2.1kVA	1Φ,3Φ,reversed phase	1U	—
IT7802-350-30	350V	606V	30A	10A	2.1kVA	1Φ,3Φ,reversed phase	2U	touch screen
IT7803-350-30U	350V	—	30A	—	3kVA	1Φ	3U	touch screen
IT7803J-350-30U*1	350V	—	30A	—	3kVA	1Φ	3U	touch screen
IT7803-350-30-ATE	350V	606V	30A	10A	3kVA	1Φ,3Φ,reversed phase	1U	—
IT7803-350-30	350V	606V	30A	10A	3kVA	1Φ,3Φ,reversed phase	2U	touch screen
IT7804-350-20U-ATE	350V	—	20A	—	4kVA	1Φ,reversed phase	1U	—
IT7804-350-20U	350V	—	20A	—	4kVA	1Φ,reversed phase	2U	touch screen
IT7805-350-30U	350V	—	30A	—	5kVA	1Φ	3U	touch screen
IT7806-350-30-ATE	350V	606V	30A	10A	6kVA	1Φ,3Φ,reversed phase	1U	—
IT7806-350-30	350V	606V	30A	10A	6kVA	1Φ,3Φ,reversed phase	2U	touch screen
IT7806-350-90	350V	606V	90A	30A	6kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7809-350-90	350V	606V	90A	30A	9kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7812-350-90	350V	606V	90A	30A	12kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7815-350-90	350V	606V	90A	30A	15kVA	1Φ,3Φ,reversed phase	3U	touch screen
IT7830-350-180	350V	606V	180A	60A	30kVA	1Φ,3Φ,reversed phase	6U	touch screen
IT7845-350-270	350V	606V	270A	90A	45kVA	1Φ,3Φ,reversed phase	15U	touch screen
IT7860-350-360	350V	606V	360A	120A	60kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT7875-350-450	350V	606V	450A	150A	75kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT7890-350-540	350V	606V	540A	180A	90kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT78105-350-630	350V	606V	630A	210A	105kVA	1Φ,3Φ,reversed phase	27U	touch screen
IT78120-350-720	350V	606V	720A	240A	120kVA	1Φ,3Φ,reversed phase	37U	touch screen
IT78135-350-810	350V	606V	810A	270A	135kVA	1Φ,3Φ,reversed phase	37U	touch screen
IT78150-350-900	350V	606V	900A	300A	150kVA	1Φ,3Φ,reversed phase	37U	touch screen
IT78165-350-990	350V	606V	990A	330A	165kVA	1Φ,3Φ,reversed phase	37U	touch screen

*1 Single-phase AC input terminal

* For higher power, please call for availability

* The above specifications are subject to change without prior notice.

High Voltage high power AC power supply

IT7800 series

High Power Programmable AC Power Supply (HV)

- Voltages up to 700 VL-N, 1050 VL-N
- Output frequency: 16-100Hz, voltage and frequency output variation rate adjustable
- Built-in AC power meter
- AC/AC+DC output mode possible
- Three-phase output
- Harmonic and interharmonic waveform synthesis
- Programmable output impedance
- Touch screen design, simple UI interface
- Arbitrary waveform output can be simulated, and CSV file import waveform is supported
- Built-in rich waveform database
- List mode analog utility reproduction function, realizing the instantaneous power interruption simulation function
- Output start/stop phase angle can be set from 0 to 360°
- Relay Ctrl relay control output function for electrical isolation between the DUT and the source
- Built-in USB/CAN/LAN/digital IO interface, optional GPIB/RS232 interface



Model	Output voltage Vac		Output current Aac Arms(3Φ)	Output power Pac	Phase	Height
	V L-N	V L-L				
IT7890-700-90	700V	1200V	90A	90kVA	3Φ	27U
IT78180-700-180	700V	1200V	180A	180kVA	3Φ	27U*2
IT78270-700-270	700V	1200V	270A	270kVA	3Φ	27U*3
IT78360-700-360	700V	1200V	360A	360kVA	3Φ	27U*4
IT78450-700-450	700V	1200V	450A	450kVA	3Φ	27U*5
IT78540-700-540	700V	1200V	540A	540kVA	3Φ	27U*6
IT78630-700-630	700V	1200V	630A	630kVA	3Φ	27U*7
IT78720-700-720	700V	1200V	720A	720kVA	3Φ	27U*8
IT78810-700-810	700V	1200V	810A	810kVA	3Φ	27U*9
IT78900-700-900	700V	1200V	900A	900kVA	3Φ	27U*10
IT78135-1050-90	1050V	1818V	90A	135kVA	3Φ	37U
IT78270-1050-180	1050V	1818V	180A	270kVA	3Φ	37U*2
IT78405-1050-270	1050V	1818V	270A	405kVA	3Φ	37U*3
IT78540-1050-360	1050V	1818V	360A	540kVA	3Φ	37U*4
IT78675-1050-450	1050V	1818V	450A	675kVA	3Φ	37U*5
IT78810-1050-540	1050V	1818V	540A	810kVA	3Φ	37U*6

Medium and Low Power AC/DC Power Supply

IT-M7700 series High Performance Programmable AC Power Supply



- 1/2 1U up to 600VA, 1/2 2U up to 1500VA
- Large touch screen display, providing waveform and data display modes (available on M7723P) *3
- AC, DC, AC+DC output modes
- Built-in AC power meter
- Built-in abundant waveform database, including 30 harmonic distortion waveforms*1
- List mode, simulate civil AC working condition, realize instantaneous power interruption simulation function *1*2
- Arbitrary waveform output function, users enables to customize waveforms*1
- Up to 50th harmonic analysis and simulation function*1
- Built-in IEC61000-4-11, 4-13, 4-14, 4-28 waveforms (available for M7723P) *3
- Surge/Trap function*1
- Front and rear edge Dimmer phase dimming function*1
- Settable output waveform start/stop phase angle
- Standard USB/LAN interface*1, optional accessories such as IT-E1205 (GPIB), IT-E1207 (RS232 & CAN), IT-E1208 (external analog & RS485), IT-E251 (multi-stage interconnecting running cable), etc.

*1 IT-M7721L/IT-M7722L does not have this function

*2 It is realized through the control software

*3 Functions available on the M7723P model

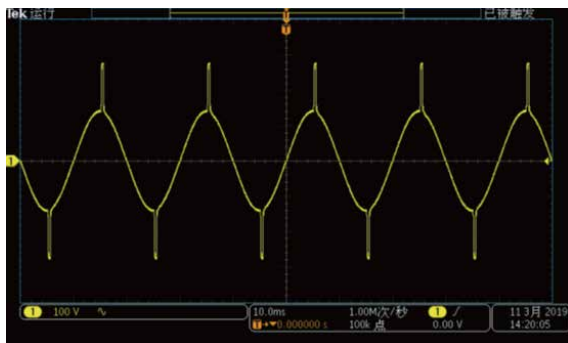
Model	Power(AC/DC)	Voltage	Current	Size
IT-M7721	300VA/300W	300V	3A	1/2 1U
IT-M7721L	300VA/300W	300V	3A	1/2 1U
IT-M7722D	300VA/300W	300V	3A	1/2 1U
IT-M7722	600VA/600W	300V	6A	1/2 1U
IT-M7723D	750VA/750W	300V	7.5A	1/2 2U
IT-M7722E	1000VA/1000W	300V	10A	1/2 2U
IT-M7723	1200VA/1200W	300V/600V	12A /6A	1U
IT-M7723E	1500VA/1500W	300V	15A	1/2 2U
IT-M7723P	1500VA/1500W	300V	15A	1/2 2U

Medium and Low Power AC Power Supply

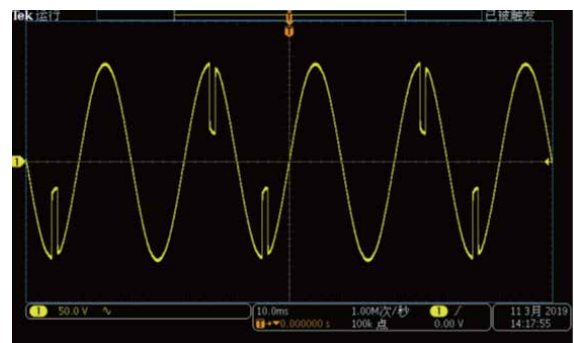
IT7200 series Programmable AC/DC Power Supply



- 2U half rack compact design, suitable for both bench top and ATE integration
- 300Vac L-N rated output, 45Hz-500Hz
- Output modes: AC, DC, AC+DC
- Built-in rich waveforms: Sine/Square/Triangle/Sawtooth/Clip sine
- Built-in AC power meter and up to 50th harmonic analysis capability
- Built-in rich waveform database, including 30 harmonic distortion waveforms
- Rich waveform editing functions: LIST/Surge&Trap/User-defined
- Up to 50th order harmonic simulation function
- The start/stop phase angle of the output waveform can be set
- Standard USB/LAN interface



Surge



Trap

Model	Power(AC/DC)	Voltage	Current	Size
IT7221	300VA/300W	300V	3A	1/2 2U
IT7222	600VA/600W	300V	6A	1/2 2U

Medium and Low Power AC Power Supply

IT7600 series

High Performance Programmable AC/DC Power Supply



- 7" DSO function, which can display real-time waveforms of voltage and current under the single unit or parallel mode
- Built-in AC power meter
- Output frequency up to 10-5000 Hz, output variable rate of voltage or frequency is adjustable
- Realize AC, DC, AC+DC output modes, AC+DC can realize simulating distortion of DC Voltage
- Built-in various waveform database
- Strong harmonic simulation capability, up to 50th harmonic simulation*1
- Strong harmonic analysis function, which can measure up to 50th voltage and current harmonic*1
- List mode can simulate civil use AC network, achieve simulation of instantaneous power interruption
- The output waveform start / stop phase angle can be set
- Support remote sense compensation function, which can improve measurement accuracy
- Sweep function, which can test the efficiency of switching power supply and catch the voltage and frequency when reaching maximum power point
- Built-in USB / RS232 / LAN / CAN communication Interface
- USB on the front panel can achieve importing and exporting file functions and data storage function

*1 10Hz-500Hz

Model	Voltage	Current	Power	Phase
IT7622	150/300V	6A	750VA	1φ
IT7624	150/300V	12A	1500VA	1φ
IT7626	150/300V	24A	3000VA	1φ

Medium and Low Power AC Power Supply

IT7300 series Programmable AC Power Supply



- Precision Linear amplification technology, low noise, high stability
- Adjustable frequency: 45Hz-500Hz
- Adjustable phase angle: 0-360°
- High current crest factor for inrush current testing
- TRIAC Dimmer dimming / governor simulation function
- Output the changed synchronous TTL signal
- LIST mode for testing power perturbation (PLD) simulation
- Simulate the surge, trap waveform
- Voltage dip, short interruption and voltage change simulation
- Measure various electrical parameters, including RMS voltage / current, actual power, power factor, VA (apparent power), peak current and other parameters
- Measurement resolution can reach 0.01W / 0.1mA, meet Energy Star standard requirement
- Built-in RS-232, USB and LAN (support SCPI protocol)
- OCP, OVP, OTP, OPP

Model	Voltage	Current	Power
IT7321	300V	3A	300VA
IT7322	300V	6A	750VA
IT7322H	500V	3A	750VA
IT7322HT	500V	3A	2250VA
IT7322T	300V	6A	2250VA
IT7324	300V	12A	1500VA
IT7324H	500V	6A	1500VA
IT7324HT	500V	6A	4500VA
IT7324T	300V	12A	4500VA
IT7326	300V	24A	3000VA
IT7326H	500V	12A	3000VA
IT7326HT	500V	12A	9000VA
IT7326T	300V	24A	9000VA

Programmable AC Load



Model	Output voltage V L-N	Output power	Output modes	Phase	Frequency	Communication
IT8200	350V	3kVA to 165kVA.....960kVA	AC,DC, AC+DC,DC+AC	1 Φ ,3 Φ , reversed phase	16-500Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT8200E	350V	21kVA to 231kVA.....1MVA+	AC,DC, AC+DC,DC+AC	1 Φ ,3 Φ , reversed phase	16-500Hz	USB,CAN,LAN,Digital IO optional GPIB,Analog&RS-232
IT8600	50~420V	1800VA to 10.8kVA	AC,DC	1 Φ or 3 Φ	45-450Hz	LAN,USB

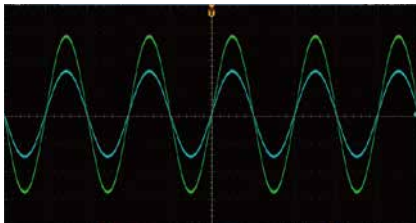
Regenerative AC Load

IT8200E series Regenerative AC/DC Electronic Load

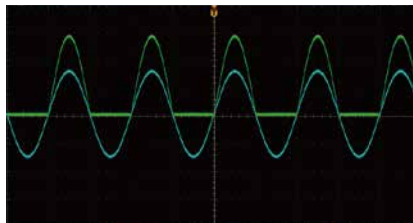


- Up to 21 kVA for 3U
- Power output up to 1MVA after master-slave parallel connection
- Comprehensive working modes selectable: single-phase, three-phase, reverse phase (split phase) . Rated voltage can be extended to 200% under reverse phase (split phase)
- Support NORMAL/LIST/SWEEP/Surge&Sag modes
- AC mode supports CC/CP/CR/CS/CC+CR/CE multiple working modes
- CE mode: simulation of 14 circuit topologies including single-phase rectifier RLC and parallel RLC
- DC mode supports 9 working modes such as CC/CR/CP/CV
- AC mode supports both rectification and non-rectification modes
- Adjustable crest factor: 1.414 ~ 5.0
- Supports phase shift, ranging from -90 ° to 90.0 ° *1

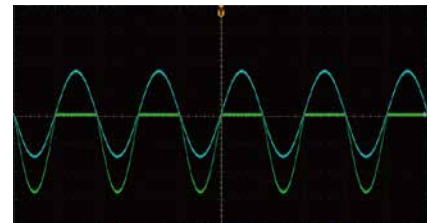
*1 After the rectification function is enabled, the setting range of phase shift is restricted by the peak factor



full wave



positive half wave



negative half wave

Model	Output voltage Vac		Output current Aac		Output power Pac	Phase	Height
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)			
IT8221E-350-105	350V	606V	105A	35A	21kVA	1Φ,3Φ,reversed phase	3U
IT8242E-350-210	350V	606V	210A	70A	42kVA	1Φ,3Φ,reversed phase	6U
IT8263E-350-315	350V	606V	315A	105A	63kVA	1Φ,3Φ,reversed phase	15U
IT8284E-350-420	350V	606V	420A	140A	84kVA	1Φ,3Φ,reversed phase	27U
IT82105E-350-525	350V	606V	525A	175A	105kVA	1Φ,3Φ,reversed phase	27U
IT82126E-350-630	350V	606V	630A	210A	126kVA	1Φ,3Φ,reversed phase	27U
IT82147E-350-735	350V	606V	735A	245A	147kVA	1Φ,3Φ,reversed phase	27U
IT82168E-350-840	350V	606V	840A	280A	168kVA	1Φ,3Φ,reversed phase	37U
IT82189E-350-945	350V	606V	945A	315A	189kVA	1Φ,3Φ,reversed phase	37U
IT82210E-350-1050	350V	606V	1050A	350A	210kVA	1Φ,3Φ,reversed phase	37U
IT82231E-350-1155	350V	606V	1155A	385A	231kVA	1Φ,3Φ,reversed phase	37U

Regenerative AC Load

IT8200 series Regenerative AC/DC Electronic Load



- 3U up to 15kVA, 1U/2U up to 6KVA
- Power output up to 960kVA after master-slave parallel connection*1
- Highly efficient power regeneration
- Comprehensive working modes selectable: single-phase, three-phase, reverse phase (split phase) . Rated voltage can be extended to 200% under reverse phase (split phase)
- Support NORMAL/LIST/SWEEP/Surge&Sag modes
- Built-in rich waveform database
- AC mode supports CC/CP/CR/CS/CC+CR/CE multiple working modes
- CE mode: simulation of 14 circuit topologies including single-phase rectifier RLC and parallel RLC
- DC mode supports 9 working modes such as CC/CR/CP/CV
- AC mode supports both rectification and non-rectification modes
- Adjustable crest factor: 1.414 ~ 5.0
- Supports phase shift, ranging from -90 ° to 90.0 ° *2
- The unit power factor1 function allows the current waveform to vary with the voltage waveform and the power factor is as close to 1 as possible

* 1 For 3U models, max.64 units can be connected in parallel

* 2 After the rectification function is enabled,
the setting range of phase shift is restricted by the peak factor

Model	Rated Vac		Rated Amps/Phs		Rated Pac	Phase	Height	Display
	V L-N	V L-L	Arms(1Φ)	Arms(3Φ)				
IT8202-350-10U-ATE	350V	—	10A	—	2kVA	1Φ	1U	—
IT8202-350-10U	350V	—	10A	—	2kVA	1Φ	2U	Touch Screen
IT8203-350-30U	350V	—	30A	—	3kVA	1Φ	3U	Touch Screen
IT8204-350-20U-ATE	350V	—	20A	—	4kVA	1Φ,reversed phase	1U	—
IT8204-350-20U	350V	—	20A	—	4kVA	1Φ,reversed phase	2U	Touch Screen
IT8205-350-30U	350V	—	30A	—	5kVA	1Φ	3U	Touch Screen
IT8206-350-30-ATE	350V	606V	30A	10A	6kVA	1Φ,3Φ,reversed phase	1U	—
IT8206-350-30	350V	606V	30A	10A	6kVA	1Φ,3Φ,reversed phase	2U	Touch Screen
IT8206-350-90	350V	606V	90A	30A	6kVA	1Φ,3Φ,reversed phase	3U	Touch Screen
IT8209-350-90	350V	606V	90A	30A	9kVA	1Φ,3Φ,reversed phase	3U	Touch Screen
IT8212-350-90	350V	606V	90A	30A	12kVA	1Φ,3Φ,reversed phase	3U	Touch Screen
IT8215-350-90	350V	606V	90A	30A	15kVA	1Φ,3Φ,reversed phase	3U	Touch Screen
IT8230-350-180	350V	606V	180A	60A	30kVA	1Φ,3Φ,reversed phase	6U	Touch Screen
IT8245-350-270	350V	606V	270A	90A	45kVA	1Φ,3Φ,reversed phase	15U	Touch Screen
IT8260-350-360	350V	606V	360A	120A	60kVA	1Φ,3Φ,reversed phase	27U	Touch Screen
IT8275-350-450	350V	606V	450A	150A	75kVA	1Φ,3Φ,reversed phase	27U	Touch Screen
IT8290-350-540	350V	606V	540A	180A	90kVA	1Φ,3Φ,reversed phase	27U	Touch Screen
IT82105-350-630	350V	606V	630A	210A	105kVA	1Φ,3Φ,reversed phase	27U	Touch Screen
IT82120-350-720	350V	606V	720A	240A	120kVA	1Φ,3Φ,reversed phase	37U	Touch Screen
IT82135-350-810	350V	606V	810A	270A	135kVA	1Φ,3Φ,reversed phase	37U	Touch Screen
IT82150-350-900	350V	606V	900A	300A	150kVA	1Φ,3Φ,reversed phase	37U	Touch Screen
IT82165-350-990	350V	606V	990A	330A	165kVA	1Φ,3Φ,reversed phase	37U	Touch Screen

AC LOAD

IT8600 series AC/DC Electronic Load

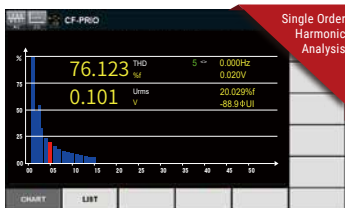


- Frequency range: 45 Hz~450 Hz
- Voltage range: 50~420 Vrms, 15~260 Vrms
- Parallel connection/ three-phase control
- Oscilloscope function supporting display of voltage and current waveform
- High-speed AD sampling, real-time capture waveform
- Measures THD (V) up to 50th Harmonic
- AC electronic load: CC/CR/CP mode
- DC electronic load: CC/CR/CP/CV mode *1
- External 0~10 V analog control input, voltage and current analog monitoring function *2
- OTP, OCP, OVP, UVP and OPP protection function
- LAN and USB communication interfaces and external USB flash disk interface *3

*1 Only IT8615 and IT8615L are with CV function

*2 Only IT8615 and IT8615L have external analog function

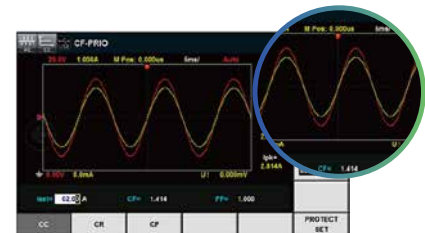
*3 For any GPIB interface option request , check with ITECH for availability.



Harmonic
Measuring BAR



Harmonic
Measuring LIST



Oscilloscope
Function

Model	Voltage	Current	Power	Phase
IT8615	50~420Vrms	20Arms	1800VA	1φ
IT8615L	15~260Vrms	20Arms	1800VA	1φ
IT8616	50~420Vrms	40Arms	3600VA	1φ
IT8617	50~420Vrms	60Arms	5400VA	1φ or 3φ
IT8624	50~420Vrms	80Arms	7200VA	1φ
IT8625	50~420Vrms	100Arms	9000VA	1φ
IT8626	50~420Vrms	120Arms	10.8kVA	1φ

Professional software

APS4000 Simulation Software for Avionics/Shipboard Power Standards



- The APS4000 software is primarily designed for power supply adaptability testing of airborne electrical equipment in aviation.
- It features built-in waveforms for mainstream aviation standards, allowing quick access without any programming background.
- The APS4000-ASTD model includes aviation regulation test standards such as MIL-STD-704, DO160, ABD0100.1.8, ABD0100.1.8.1, GJB181B, and HB20326.
- The APS4000-B787&AMD model includes commercial aviation regulation test standards such as B787 and AMD24C.
- The APS4000-AVALL model integrates all aviation standards covered in both APS4000-AVSTD and APS4000-B787&AMD.
- The APS4000-1399 is suitable for testing shipboard electrical equipment.
- It can simulate various power outputs used in more-electric/all-electric aircraft, including single/three-phase constant frequency, single/three-phase variable frequency, low-voltage DC, and high-voltage DC.
- It supports simulation of both normal and abnormal aircraft power supply conditions, with built-in regulation-based test items for quick execution.
- Provides test report generation functionality.
- Compatible with ITECH high-performance programmable AC/DC power supply series: IT7800/ IT7800E/IT7900P/ IT7900EP.

APS4000 Models

Model	Regulatory Standards	Revision
APS4000-ASTD	MIL-STD-704, DO160, ABD0100.1.8(A380), ABD0100.1.8.1(A350), GJB181B, HB20326	MIL-STD-704: Rev A/B/C/D/E/F DO160: Rev E/F/G A380: Rev D/E A350: Rev C GJB181B: Rev B HB20326: Rev 2016
APS4000-B787&AMD	B787, AMD24C(A400M)	
APS4000-AVALL	MIL-STD-704, DO160, ABD0100.1.8(A380), ABD0100.1.8.1(A350), GJB181B, HB20326, B787, AMD24C(A400M)	
APS4000-1399	MIL-STD-1399-300	

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