

1000 VA
1500 VA
15-600 Hz
150/300 VAC



Nemko CE

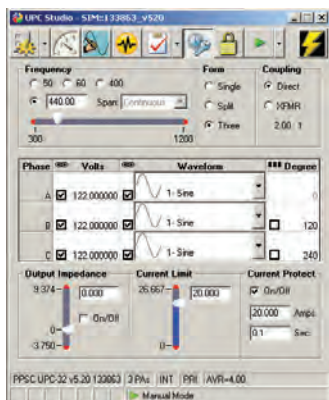
Standard Features:

- Single Phase, Dual Range 150/300 VAC Output
- 15 to 600 Hz. Full Power Operation – 5000 Hz small signal bandwidth
- Universal (115-240V, 1Ø, 50/60Hz.) PFC input with inrush current limiting
- 10A Universal Front Panel Output Receptacle and Full Rating Rear Panel Output Terminals
- Precision Voltage Programming – 0.05% with Continuous Self-Calibration (CSC) engaged
- True-RMS metering of volts, amps, and power
- 99 stored programs quick setup recall
- RS-232 Interface standard. GPIB option
- UPC Studio Software Suite

UPC Manager Software Suite

Master the Power of the Wave!

UPC Manager Software gives you the tools necessary to quickly and easily operate your AC Power Source. With our intuitive graphical interface, control all areas of AC Power Source testing.



GPIB

RS232

ADX Series

The ADX Series consists of two compact, single-phase programmable AC power sources offering either 1000VA or 1500VA of output power. Its feature set is targeted at basic AC power testing or frequency conversion requirements where programmability and accuracy are important.

The ADX offers ease of installation and a good range of features for most AC power test applications. Using state-of-the-art, high frequency, pulse-width-modulated (PWM) power conversion technology, the ADX Series represent a terrific value.

Convenient to operate from its front panel keypad or over the included RS232 interface, the ADX models are well suited for automated testing (ATE), frequency conversion, laboratory, and bench-top power applications.

AC TEST POWER

All ADX models are equipped with a powerful micro-controller and support SCPI remote control command syntax. They can supply a wide range of voltage and frequency output combinations to a device under test while metering all output parameters.

FREQUENCY/VOLTAGE CONVERSION

The ADX is an excellent source of stable AC Voltage over a frequency range of 15 to 600 Hz. The output frequency is quartz-crystal stabilized. Output voltages up to 300 Vrms are supported.

UNIVERSAL PFC INPUT

Worldwide input voltages and power frequencies are accommodated by the wide range, power-factor-corrected (PFC), input power supply. Inrush current limiting permits operation in laboratories with soft or limited input service. Compliance to CE, CSA, and UL test standards adds confidence to the design and allows the product to be shipped anywhere in the world.

UPC1 CONTROLLER

The ADX provides many of the same features as found in higher power Pacific Power Source models. Providing both manual and programmable control, the ADX is compatible with Pacific's UPC Studio software.

The Leader in AC Power Technology

An early pioneer in the development of solid-state power conversion equipment, Pacific Power Source continues to develop, manufacture, and market both linear and high-performance PWM AC Power Sources. Pacific's reputation as a market and technology leader is best demonstrated by its continuing investments in both research and development and world-wide customer support. With corporate owned offices in the United States, Germany, the United Kingdom and China, local personalized support is always nearby.

PACIFIC
POWER SOURCE

THE POWER OF EXPERTISE

Output Rating

MODEL	Rated Power ¹ (VA)	Voltage Max ² (Vrms I-n/I-I)	Current ³ (Rated / Max. Arms)		Output Frequency (Hz)
			150V Range	300V Range	
110ADX-UPC1	1000	0-150 / 0-300	11 / 16.5	5.5 / 8	15.00 - 600
115ADX-UPC1	1500		16 / 24	8 / 12	

NOTES:

1. Rated output power is based on a combination of nominal output voltage, rated current and load power factor.

2. Vmax is maximum RMS output voltage with full rated load applied.

3. Available current will vary with output voltage and power factor. See "Output Rating Charts" below. Values shown in table are Rated RMS Current and absolute maximum RMS Current.

Output Specifications

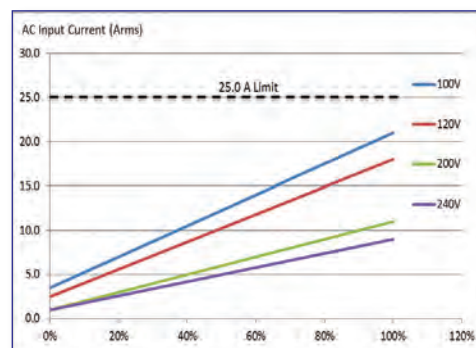
VOLTAGE	Range Resolution Accuracy	0 - 150 / 0 - 300 Vac 0.1 Vac ± 0.05% of command voltage referenced to internal voltmeter with CSC engaged.
LOAD REGULATION	15-200Hz 200-600Hz	< 1.5 % (Improves to < 0.1% F.S. < 2.0 % with external sense and CSC' engaged)
VOLTAGE DISTORTION (under full resistive load)	15-200Hz 200-600Hz	< 0.25% < 0.50%
FREQUENCY	Range Resolution Accuracy	15 to 600 Hz 4 digits ± 0.01%
PEAK CURRENT	Max.	40A all models
RESPONSE TIME	80 uSec. typical for 10%-90% Load Step	

Note 1: CSC = Continuous Self-Calibration. Provides for improved output accuracy by using internal voltmeter as a reference to adjust output voltage to obtain set voltage.

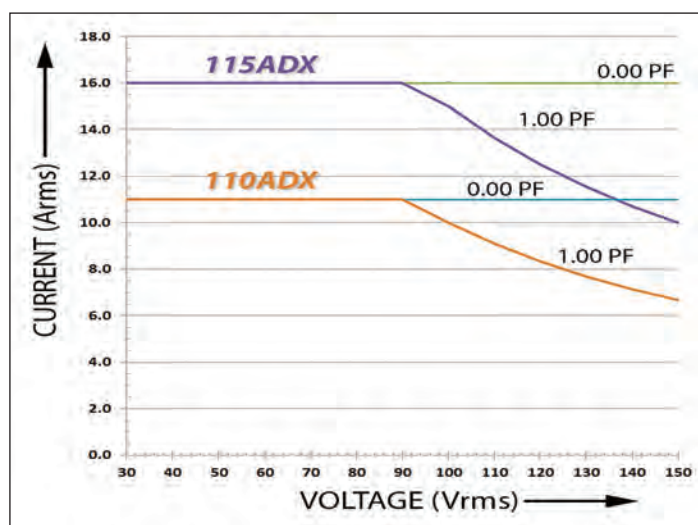
AC Input Specifications

INPUT VOLTAGE	1 Phase, 115 - 240 VAC ±10%	
INPUT FREQUENCY	47 - 63 Hz	
CURRENT (@ Full Rated Power)	110ADX 115ADX	14A @ 120V, 7A @ 240V 19A @ 120V, 10A @ 240V
POWER FACTOR	> 0.98 (Active Power Factor Correction)	

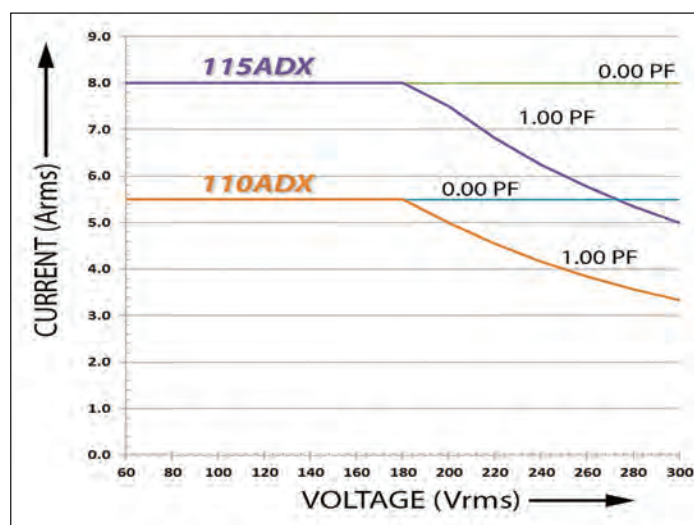
Both ADX units are equipped with a 30A, single phase Input circuit breaker and a 25A electronic input current limit. Input current demand will vary with model, input voltage and load. Care must be taken to ensure that load on the power source does not cause it to demand more input current than that provided by local mains.



Output Rating Charts



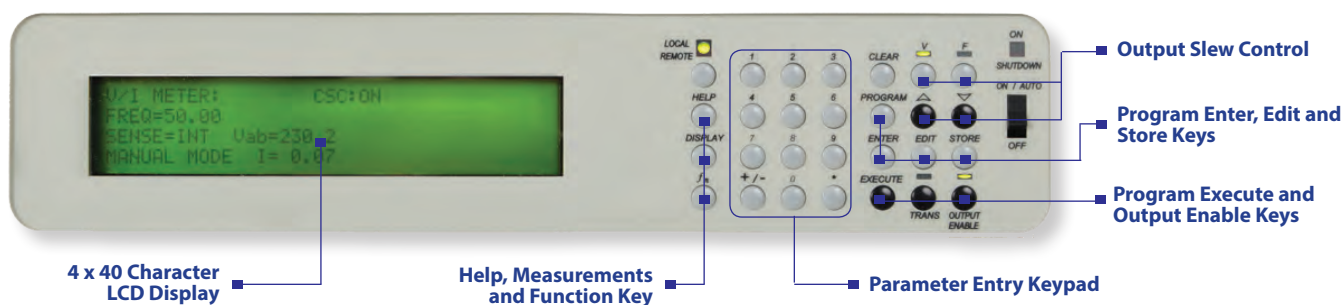
LOW VOLTAGE RANGE



HIGH VOLTAGE RANGE

NOTE: Rated continuous load current as a function of Power Factor and Output Voltage – Nominal Input Line. Short term overloads to 120% are permitted. Operating time before thermal shutdown or circuit breaker trip will vary from seconds to several minutes depending upon line and temperature conditions

Total Control and Metering of AC Power - Simple, Intuitive Operation



The ADX offers the most commonly used AC power source programming and metering functions without having to navigate through complicated menus or screens. **The Universal Programmable Controller (UPC)** used on the ADX Series supports frequency, voltage and current limit programming. It also supports a full set of measurements, **all standard**. This basic set of functions makes front panel operation much simpler.

Front Panel operation is made easy by a full keyboard with decimal entry pad and a large backlit LCD display. Equipped with RS232 Interface, remote control commands are structured in accordance with SCPI (Standard Commands for Programmable Instruments) for easy of integration into ATE Systems. A GPIB Interface option is available.

UPC Controller Functions

PROGRAMMING	Voltage, Voltage slew rate, Frequency, Frequency slew rate, Current Limit	
VOLTAGE SENSE	Selectable Internal or External	
CURRENT LIMIT	CC Mode and CV Mode	
Constant Current Mode (CC)	Range Resolution Accuracy	0.1 - 50 Arms 0.025 A ± 3.0% F.S.
Constant Voltage Mode (CV)	Range Resolution Accuracy	0.1 - 50 Arms 0.025 A ± 3.0% F.S.
Programmable CV Trip Delay	Range Resolution Accuracy	0.1 sec - 109.22 mins 0.01 sec ± 0.01 sec
PROGRAMS	Non Volatile	#1 ~ #99. Stores 99 front panel settings for quick recall (V, I, F)
REMOTE CONTROL	Standard	RS232 Serial, DB9 Baud Rates: 300 to 38400 Parity: None, Odd, Even

UPC External Analog and Digital I/O

ANALOG AUX INPUT	Input summed with internal oscillator signal. Aux Input to Output Gain = 35	
AMPLITUDE MODULATION	Modulation Depth ± 100% F.S. Vin = ± 10Vpk (20Vpk-pk)	
REMOTE INHIBIT	Output Enable / Disable, Contact Closure	
DRM CLOCK OUT	TTL Output	
SYNC OUT	Positive Zero Crossing (0°) TTL Output	

UPC Measurements

VOLTMETER	Range Resolution Accuracy	0 - 354 Vrms 0.1V / 0.001V Display/Remote ± 0.2% F.S. + Cal Ref.
AMMETER	Range Resolution Accuracy	50 Apeak 0.001A ± 0.2% F.S. + Cal Ref.
POWER METER	Range Resolution Accuracy	10,680 W and VA 0.1 W / VA ± 1.0% F.S.
POWER FACTOR	-1.000 to +1.000	
CREST FACTOR	1.000 - 10.00	

General and Environmental Specifications

OPERATING TEMPERATURE	Full Power Derated	0° - 40° C / 32° - 104° 0° - 55° C / 32° - 131° < 600W
HUMIDITY	Relative	0 - 95%, non-condensing
COOLING	Forced air cooling, 240 CFM Variable fan speed control Side air intake, Rear exhaust	
MAX. ALTITUDE	3000 m / 10000 feet	
ENVIRONMENT	Pollution Degree 2	
REGULATORY APPROVALS	Safety EMC	IEC 61010-1:2010, Ed 3 IEC 61326-1:2006
LISTINGS	CE Mark, NRTL CCL	

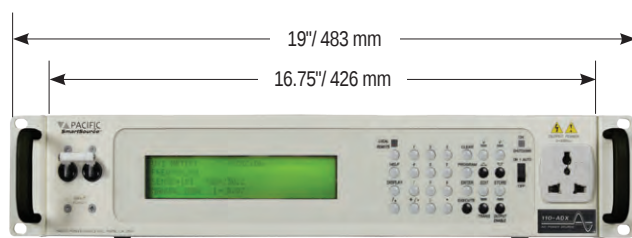
Choose Your Power Level



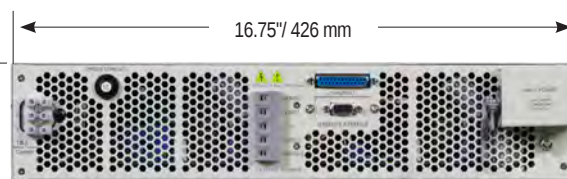
1000VA, 11A, 300V



1500VA, 16A, 300V



The ADX is designed for bench top or 19" equipment rack operation.
Shown with provided rack mount handles.



The ADX Rear Panel provides connections for AC Input, AC Output,
External Sense, I/O and RS232

Mechanical Specifications

DIMENSIONS	H x W x D	89 x 426 x 600 mm 3.5" x 16.75" x 23.6" (Excluding rack handles and Safety covers)
RACK MOUNT	Designed to accept slide rails for mounting in a 19" Instrument Cabinet. Rack slides can be provided as a cost option.	
WEIGHT	Net	18.2 kg / 40 lbs
	Shipping	21 kg / 47 lbs
CONNECTORS Rear Panel	Input Power	Screw Terminal Block (L, N, G) Safety cover w/ strain relief (Optional regional line cords available)
	Output Power	Safety Terminal Block (Sense1, L1, N, L2, Sense2)
	AUX I/O	J5, DB25
	Rem. Inhibit	Screw Terminal (1, 2, 3)
CONNECTORS Front Panel	Output Power	Universal Socket 10A Max., Fused

Available Options

/G	GPIO Interface Option. (Replaces RS232)
Rack Slide	790010-003 (requires 2)
UPC STUDIO	Windows Control Software. (no charge)

Country Specific Line Cord Options

COUNTRY	PART NUMBER	COUNTRY	PART NUMBER
Argentina	775102	Israel	775107
Australia	775100	Italy	775109
Brazil	775101	Switzerland	775105
China	775104	UK / Ireland	775110
Continental Europe	775111	US, NEMA 5-15P	775114
Denmark	775106	US, NEMA 5-20P	775113
India	775108	US, NEMA 6-20P	775112

Ordering Information

Model	Controller	Options	Input Voltage (V_{IN})
☐ 110ADX	☐ UPC1	See List Above	☐ 115V - 240Vac, 1Ø ± 10%, 47-63Hz
☐ 115ADX			

Available Models

110ADX-UPC1
115ADX-UPC1

Order Example

- 115ADX-UPC1
- 1.5kVA, 1-Phase, AC Power Source
 - 1 Phase Universal Input Voltage
 - Includes RS232 Control Interface

Typical Delivery Items

- AC Power Source
- English Manuals on CD ROM
- Rack Mount Kit
- UPC Studio Software - (Download)
- LabVIEW™ Driver (Download)
- Certificate of Compliance
- CE Conformity Document



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