

ultrasonic spot welding systems

ACTUATORS

FEATURES

- Rigid Cast Center Frame
- Single Piece, Dual Nodal Mount Horn and Booster Stack
- Precisely Adjustable Up and Down Stops
- Independent Horn and Converter Air Cooling Flow Controls
- Pre-Lubricated and Sealed Linear Bearings
- Pneumatic Actuation
- Electronic Pressure Control



MWB201 Actuator
on Integral Base



MWA201
Actuator

Sonics' 20 kHz ultrasonic metal welding systems consist of an actuator (available versions shown above) and a power supply (MX or MSC series) shown below.

POWER SUPPLIES



MX Series Low Profile



MX Series High Profile



MSC Low Profile



MSC High Profile

MODELS

MXE - Time and Energy Based Weld Modes

MSC - *SmartControl* with Time and Energy Based Weld Modes and Weld Height Verification

POWER LEVELS

- 2500 Watts Peak Power
- 4000 Watts Peak Power

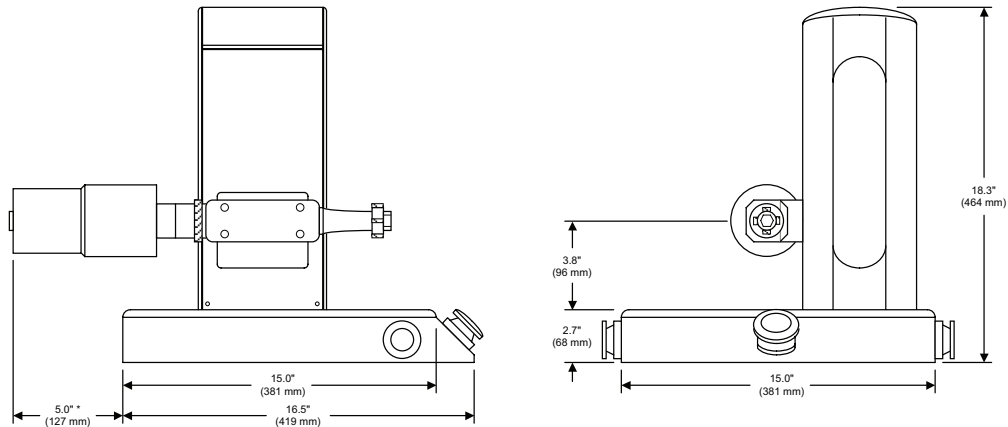
Sonics' 20 kHz power supplies are available in two versions, the MX Series, with standard keypad operation and the *SmartControl* MSC Series with full color touch screen controls. The features of the models are compared below.

POWER SUPPLY FEATURES	MXE	MSC
Microprocessor Controlled	■	■
Automatic Frequency Tuning	■	■
Digital Amplitude Control	■	■
Digital Force Triggering	■	■
Weld Time Delay Setting	■	■
Afterburst Time Setting	■	■
Multiple Job Storage	■	■
Digital Stack Wattage Display	■	■
Digital Stack Frequency Display	■	■
Weld Cycle Counter	■	■
Upper and Lower Weld Mode Limit Settings	■	■
Soft Start Overload Protection Circuitry	■	■
Load Regulation Circuitry	■	■

POWER SUPPLY FEATURES	MXE	MSC
Color Touch Panel Operator Screen		■
Weld Cycle Graph Chart Screen		■
Weld Teach Mode		■
Weld Sequence Mode		■
Amplitude and Pressure Ramping		■
Timed Converter and Horn Air Cooling Cycle		■
English and Metric Weld Height Settings		■
Password Protected Four-Level User Access		■
Serial Printer Port Connection	■*	■
PLC I/O Interface Connection	■*	■

*Optional

MWB201 dimensional data



**Add Approximately 5.5" (140 mm) for Secondary Booster)

specifications

Actuator Data:

MWA201 Actuator Weight: 44 Lbs. (19.9 kg)
 MWB201 Actuator on Integral Base Weight: 85 Lbs. (38.5 kg)
 Pneumatic Requirement: 80 PSI Clean and Dry Air Service

Low Profile Power Supply Data:

Peak Output Power: 2500 W
 Power Supply Weight: 21 Lbs. (9.5 kg)
 Power Supply Dimensions: 15.2" (386 mm) Wide x 7.0" (178 mm) High x 18.7" (476 mm) Deep
 Power Requirement: 220 VAC @ 20A

High Profile Power Supply Data:

Peak Output Power: 4000 W
 Power Supply Weight: 70 Lbs. (31.7 kg)
 Power Supply Dimensions: 17.6" (447 mm) Wide x 10.7" (272 mm) High x 22.5" (571 mm) Deep
 Power Requirement: 220 VAC @ 30A

system options

**Foot Pedal
 Switch with
 Emergency Stop**



Secondary Booster:
 Aluminum or Titanium
 Secondary Booster

