### Metcal MX-500 Soldering/Rework System - Data Sheet



Metcal's MX-500 Soldering and Rework System has been reimagined, adding features and a new look to a bench top icon. The system utilizes SmartHeat® Technology, wherein each cartridge is equipped with a self-regulating heater which 'senses' its own temperature and closely maintains its preset idle temperature for the life of the heater-tip. The tip temperature is determined by the inherent metallurgical properties of the heater; no external adjustment or equipment is required. The MX-500 retains switchable dual port, 40W operation while introducing numerous new features in a new housing.

#### **FEATURES AND BENEFITS**

- Integrated Power Indication Meter: a built in net power meter which will display a graphical and numerical representation of the power applied to the cartridge.
- User Programmable PowerSave Mode: the time to enter PowerSave Mode is adjustable from 10 to 120 minutes.
- **Ground Fault Interrupt:** AC ground monitor detects power line ground failures and immediately alerts the operator and shuts down the system. Only after the power line ground has been restored can the MX-500 be restarted and soldering operations can be resumed.
- Universal Power Supply: automatically senses the input line voltage and adjusts accordingly, which allows for worldwide operation without adaptors or a change in performance.
- Compatibility with all MX products: the MX-500 redesign allows full compatibility with existing and previous MX upgrade kits, tip-cartridges, handpieces and accessories.
- Greater process control with SmartHeat® Technology
- Reduced space requirements



#### **MX-500 SYSTEMS CONFIGURATION & UPGRADE KITS**

#### ONE HAND-PIECE SYSTEM

MX-500S Soldering / Rework System Power supply, MX-RM3E soldering and

rework hand-piece and WS1 sleeper workstand



#### TWO HAND-PIECE SYSTEMS

#### **MX-500SPT Rework System**

Power supply, MX-PTZ precision tweezer hand-piece with MX-W4PT TipSaver workstand and MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand



Power supply, MX-DS1 desoldering hand-piece with MX-W5DS TipSaver workstand and MX-RM3E soldering and rework hand-piece and WS1 sleeper workstand

#### POWER SUPPLY WITHOUT HAND-PIECE

MX-500P: MX-500 dual port switchable power supply

#### **UPGRADE KITS**

**MX-UK1:** MX-H1-AV Advanced Soldering and Rework Hand-piece with MX-W1AV TipSaver Workstand

**MX-UK2:** MX-H2-UF Ultra Fine Soldering and Rework Hand-piece with MX-W1AV TipSaver Workstand

MX-UK4: MX-PTZ Precision Tweezers
Hand-piece with MX-W4PT TipSaver Workstand

**MX-UK5:** MX-DS1 Desoldering Hand-piece with MX-W5DS TipSaver Workstand



## MetcalMX-500

### Soldering/Rework System - Data Sheet



#### HAND-PIECES AND CARTRIDGE SERIES

The MX-500 Series offers users a choice of hand-pieces to meet the customer's application needs. Each hand-piece has its own range of cartridges with many choices available for tip geometry and temperature.



These hand-pieces are compatible with the Metcal MX-500 and MX-5200 Soldering and Rework Systems.

#### **ACCESSORIES**

AC-Y10	Yellow sponge, pack of 10	WS1	Sleeper Soldering Workstand
AC-BP	Brass pad, pack of 10	MX-W1AV	TipSaver Soldering Workstand
AC-BRUSH	Soft Brass brush	MX-W4PT	TipSaver Precision Tweezer Workstand
MX-CP1	Cartridge removal pad	MX-W5DS	TipSaver Desoldering Workstand
AC-TC	Desolder Tip Cleaner	WST	Talon Workstand

# TECHNICAL SPECIFICATIONS CONFIGURATIONS

Ambient Operating Temperature	10 to 40°C	
Maximum Enclosure Temperature	55°C	
Input Line Voltage	100 – 240 VAC, grounded circuit	
Input Line Frequency	50/60 Hz	
Rated Power Consumption	70 Watts	
Output Power	40 Watts max. *	
Output Frequency	13.56 MHz *	
Power Supply Dimensions w x d x h	12.1cm (4.8") x 12.1cm (4.8") x 22.2cm (8.8")	
Certification / Marking	cNRTLus, CE	
Tip-to- Ground Potential	<2mV	
Tip-to-Ground Resistance	<2 ohms	
Idle Temperature Stability	± 1.1°C in still air	
Hand-piece Cable Length	L=183cm (72"), burn proof, ESD safe	
Hand-piece Connector	F connector	
Weight of the power supply	2.65 Kg (5.85 lbs)	

<sup>\*</sup> RF SmartHeat Technology provides greater power. More details at www.metcal.com





