# **Metcal PS-900**

# 60W SmartHeat® Soldering System



### **Technical Specifications**

#### Power Supply

Ambient Operating Temperature	10 - 40°C (50° - 104°F)
Maximum Enclosure Temperature	65°C (149°F)
Input Line Voltage	100 - 240 VAC
Power Consumption	90 Watts Max.
Input Line Frequency	50/60 Hz
Output Power	60 Watts Max.*
Output Frequency	450 KHz
Power Cord (3-wire)	183cm,18/3 SJT
Dimensions W x D x H	80 x 160 x 115mm (3.1" x 6.3" x 4.5")

\* RF SmartHeat Technology provides greater power. For more details, visit www.metcal.com/smartheat

#### Soldering Handle and Coil Assembly

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Tip-to-Ground Potential	< 2 mV
Tip-to-Ground Resistance	< 2 ohms
Idle Temperature Repeatability	± 1.1°C in still air
Handle Cord Assembly Length	122cm – burn proof, ESD safe
Connector	3-pin power connector
Overall length (with tip)	230mm (9.06") with standard tips
Grip diameter	13mm (0.51")
Tip to grip	58mm (2.28")
Tip shaft diameter	8.0mm (0.31")
Tip length	82 to 93mm (3.25" x 3.66") Typical
Workstand W x D x H	105 x 175 x 90mm (4.1" x 6.9" x 3.5")

#### **PS-900 Features and Benefits**

- Powerful, easy to use unit with a small footprint
- Large selection of blade and soldering tips ensures that the PS-900 can handle your project requirements
- SmartHeat® technology operates at lower and safer temperatures and eliminates overshoot.
- No calibration required which saves money and down-time.

#### **Power And Control**

Metcal's PS-900 Soldering System, powered by SmartHeat® technology, is a powerful, cost-effective soldering system with a small benchtop footprint. The PS-900 provides exceptional thermal control and enables operators to produce high quality, repeatable solder connections with exceptional speed.

The PS-900 is designed for lead-free soldering, multilayer boards and thermally demanding components. With SmartHeat technology, the PS-900 can solder at lower temperatures even in demanding lead-free soldering processes. Operators using the PS-900 are more productive and materials are safe from temperatures that can damage other components.

The PS-900 with SmartHeat® is easy to use, eliminates calibration time and hassle and requires very little maintenance. Moreover, the soldering tips are designed for long life which reduces overall operating costs. Metcal's PS-900 is the best choice for small or large production environments which need exceptional performance from a unit with a small footprint.







## **Metcal PS-900** 60W SmartHeat® Soldering System

### **PS-900 System and Accessories**

Part No.	Photo	Description	
PS-900	1 11010	Complete System	
Includes:			
PS-PW900	Power Supply		
PS-HC3	2	Hand-piece (PS-H3) and Coil Assembly (PS-CA3)	
WS2-NS	3	Workstand, Black	
SFV-CH15A	6	Economical and Affordable Chisel Solder Tip 1.5mm (.06")	
Other Accessories Available:			
PS-H3	4	Hand-piece only (does not include PS-CA3 Coil Assembly)	
PS-CA3	5	Coil Assembly for SxV Soldering Tips (9) and CxV Blade Tips (10) Only	
WS2		Auto-sleep Workstand, Black	
WS2G		Auto-sleep Workstand, Green	
AC-CP2	7	Tip Removal Pad	
PS-900 Acces	sories F	For Use With PHT Tips	
PS-CA1	8	Coil Assembly for PHT Soldering Tips Only	
PS-HC1		Hand-piece (PS-H3) and Coil Assembly (PS-CA1)	
PS-H3	4	Hand-piece only, NO PS-CA1 Coil Assembly	
P2-H3	4	Hand-piece only, NO PS-CA1 Coll Assembly	



### Also Available - PS-900-Solar Soldering





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### PS-900-Solar

Designed specifically for the solar industry, Metcal's PS-900 Solar Unit can solder wires, tabs and stringers without causing damage to expensive solar materials.

PS-900-Solar uses SmartHeat® technology and a special hand-piece to deliver the precise heat needed for reliable connections. SmartHeat's internal microprocessor enables the unit to operate at lower temperatures to help eliminate micro-cracking or stressing expensive material.

For more information about Metcal's PS-900-Solar Soldering System or any Metcal product, visit www.Metcal.com or contact your local Metcal representative.

0.187" 0.52"	12
4.75mm 0.157* 4mm	9

STV-DRH440A Hoof Tip 4mm (.157")

Part No.	Photo	PS-900-Solar
PS-PW900	1	Power Supply
PS-900-PC9	11	Hand-piece with 9' Cord (274cm)
PS-CA3	5	Coil Assembly
STV-DRH440A	12	High Performance Soldering Tip
WS2-NS	3	Workstand
AC-CP2	7	Tip Removal Pad
SxV Tips	10	Soldering Tips (SOLD SEPARATELY)



# Metcal PS-900 SxV Soldering Tips

Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3, MFR-H2-ST and MFR-H2-ST2 hand-pieces, PS-CA3, MFR-CA2 and MFR-CA3 Coil Assemblies SXV SOLDERING TIPS SFV-CH25 SFV-CH10A 0.43° 11.0mm STV-CH25 STV-CH10A SCV-CH25 SCV-CH10A SFV-CH10AR SFV-CH30AR STV-CH10AR STV-CH30AR SCV-CH10AR SCV-CH30AR SFV-CH10 SFV-CH50A \_\_0.43'\_\_ 11.0mm 0.44" 11,3mm STV-CH10 STV-CH50A SCV-CH10 SCV-CH50A SFV-CH15A SFV-CH50AR 11.7mm STV-CH50AR STV-CH15A SCV-CH15A SCV-CH50AR SFV-CH15AR SFV-CH50 0.4"\_ 13.4m 10.0mm STV-CH15AR STV-CH50 0.2" SCV-CH15AR SCV-CH50 SFV-CHB15 SFV-CNL03AR STV-CHB15 STV-CNL03AR .01\* SCV-CHB15 SCV-CNL03AR SFV-CH18AR 0.016 SFV-CNB04A 0.61\* \_\_\_.528"\_\_ 13.4mm 15.5mm STV-CH18AR STV-CNB04A 1.8mm SCV-CH18AR SCV-CNB04A 0.21 SFV-CH20 SFV-CN05A \_\_0.43\*\_\_ 11,0mm 0.72\* STV-CH20 STV-CN05A 0.08\* 0.016 SCV-CH20 SCV-CN05A SFV-CH24A SFV-CNB04AR .719\* STV-CH24A STV-CNB04AR \_\_19.6mm SCV-CH24A SCV-CNB04AR SFV-CH25AR SFV-CNL04 0.53\* 13.4mm STV-CH25AR STV-CNL04 0.016 SCV-CH25AR SCV-CNL04

F = FR4 / Fiberglass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications.



## **Metcal PS-900** SxV Soldering Tips / CxV Blade Tips

Compatible with: PS-900, MFR-1120, MFR-2220, MFR-2222 Systems, PS-HC3, MFR-H2-ST and MFR-H2-ST2 hand-pieces, PS-CA3, MFR-CA2 and MFR-CA3 Coil Assemblies SXV SOLDERING TIPS SFV-CN05AR 13.7mm .02" STV-CN05AR SCV-CN05AR 0.5mm SFV-CN05 STV-CN05 SCV-CN05 SFV-CNB05 0.51°\_ 13.0mm STV-CNB05 0.02 SCV-CNB05 SFV-CNL10A 0.71\* 18.0mm STV-CNL10A 0.04" SCV-CNL10A 1.0mm SFV-CNL10AR 15.0mm STV-CNL10AR SCV-CNL10AR SFV-CNL10 0.51" STV-CNL10 0.04" SCV-CNL10 SFV-CNL14 0.59° 15.0m STV-CNL14 SCV-CNL14 SFV-DRH20 0.55\* 0.8 14.0mm STV-DRH20 2.0mm SCV-DRH20 SFV-CNL20 0.591 STV-CNL20 SCV-CNL20 SFV-WV20 STV-WV20 SCV-WV20 SFV-DRK45A STV-DRK45A SCV-DRK45A SFV-DRK50 STV-DRK50 SCV-DRK50

F.	2.0mm 45°	S <b>F</b> V-DRH420AR S <b>T</b> V-DRH420AR S <b>C</b> V-DRH420AR
H00	0.10' 25mm - 0.51' - 13.0mm	SFV-DRH20CP STV-DRH20CP SCV-DRH20CP
	3.0mm 1 45°	S <b>F</b> V-DRH430AR S <b>T</b> V-DRH430AR S <b>C</b> V-DRH430AR
	Ton One	STV-DRH630AR SCV-DRH630AR
	0.137 - 0.40° - 12.2mm 20.079 2mm	S <b>F</b> V-DRH420A S <b>T</b> V-DRH420A S <b>C</b> V-DRH420A
	0.14 3.6mm - 0.51" - 13.0mm	SFV-DRH30CP STV-DRH30CP SCV-DRH30CP
		S <b>F</b> V-DRH440R S <b>T</b> V-DRH440R S <b>C</b> V-DRH440R
	1	S <b>F</b> V-DRH640AR S <b>T</b> V-DRH640AR S <b>C</b> V-DRH640AR
	0.18' 45° - 0.51' - 13.0em	SFV-DRH40CP STV-DRH40CP SCV-DRH40CP
	0.167 - 0.52° - 4.75mm 0.157° 4mm	S <b>F</b> V-DRH440A S <b>T</b> V-DRH440A S <b>C</b> V-DRH440A
	137mm	S <b>F</b> V-DRK30AR S <b>T</b> V-DRK30AR S <b>C</b> V-DRK30AR
	tions to the state of the state	S <b>F</b> V-DRK45AR S <b>T</b> V-DRK45AR S <b>C</b> V-DRK45AR

CxV BLADE	TIPS		Α
	CFV-BL100	CCV-BL100	10mm (.40")
0.36* 9.1mm	CFV-BL25	0 CCV-BL250	25mm (1")
	CFV-BL35	0 CCV-BL350	35mm (1.4")
	CFV-BL40	0 CCV-BL400	40mm (1.6")
	CFV-BL50	0 CCV-BL500	50mm (2")

F = FR4 / Fiberglass, for most standard applications T = Temperature Sensitive C = Ceramic for high thermal demand applications.

