



www.weller-tools.com/wxsmart

## Welcome to the world of WXsmart!

The all-in-one WXsmart hand soldering platform offers maximum traceability and connectivity. As the most connected, controlled and secured hand soldering solution in the world, WXsmart is connecting the future of soldering! Explore the main benefits of WXsmart here:

## CONNECT

Maximum connectivity, supporting IoT standards for full traceability with mobile-enabled, easy remote control access.

## SAFE

The first system with built-in cyber-security to prevent costly downtimes.



**A** 6 😤

180

350°

Weller

Weller

## **SMART**

The all-in-one station acts as the brain of the workbench by consolidating all soldering applications into one station.



Weller



Total Process Control (TPC) to manage your complete soldering process from tip to station.



TOTAL PROCESS CONTROL



Multiple users 🗸

- ✓ Operators✓ Supervisors
- ✓ Research & Development
- ✓ Repair Departments

- Multiple industries
  - Electronics
  - Medical Device Manufacturer
  - ✓ Aerospace
  - ✓ Automotive
  - LED and Solar Technology

## WX smart ~ connect 🚿

Maximum connectivity, supporting IoT standards for full traceability with mobile-enabled, easy remote-control access.



Hardware & Interfaces

wxsmart@weller-tools.com

### Easy Data transfer

### Weller Software



# WX smart ~ smart soldering @

The all-in-one station acts as the brain of the workbench by consolidating all soldering applications into one station. The platform fully supports Smart Soldering 4.0 with intelligent tips and tools saving cost, time and space.

Weller

180

+ \* 350

## All-in-one station

Full rework station for all applications from XS to XXL component sizes

- ✓ High precision soldering (Pico)
- ✓ General purpose soldering (Micro)
- Heavy duty soldering (Ultra)
- ✓ Hot air
- Rework
- Desoldering

### **Benchtop solution**

The WXsmart is a centralized control unit acting as the brain of the workbench – by controlling multiple devices at the same time

- ✓ Rework Module WXair
- ✓ Fume extraction
- ✓ Preheating plate
- ✓ Soldering bath
- Calibration Unit

### Intelligent irons

For multiple functions

- ✓ Visual process control
- Intelligent tool detection
- ✓ Up to 10 parameter settings which can be customized

### Fast heat-up time:

-250 -200 -150 -100 -50 -0 **3 sec.** From 50°C to 350°C From 120°F to 620°F



## Intelligent soldering tips

New smart tips offer multiple new features thanks to the integrated chip in every soldering tip:

- Extremely fast heat-up time 3 sec with excellent heat transfer & recovery time
- Automatic tip identification
- Tip lock functionality for full process control
- Unique individual serial number for full traceability
- ✓ Tip off-set function



Integrated data storage allowing full traceability for calibration history

# WX smart ~ smart soldering (?)

## Modularity «

Backwards compatibility of tips and tools for soldering, desoldering and hot-air applications, ensures the security of your all-in-one station investment.

tillin



**Calibration Unit WCU** 

23.5°C

0

WXHAP Hot Air Iron

WXDP Desoldering Iron

WXDV Desoldering Iron

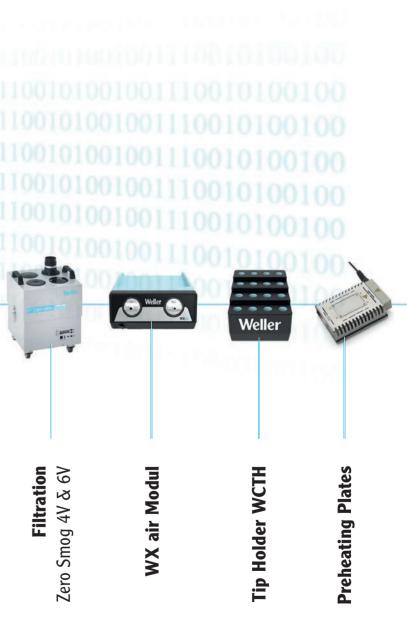
WXMT Tweezers

WXP65 Soldering Iron

WXMPSMS Pico and Micro Soldering Iron

Soldering iron WXUPSMS Heavy Duty

- Once invested in the WXsmart platform, the system can
- be expanded at will. Many tools that you already use can
- be easily connected. Thus we protect your investment and
- you are prepared for the future. With only one station.



## WX smart ~ control

Veller

Weller

TOTAL **P**ROCESS

CONTROL

Total Process Control (TPC) to manage your complete soldering process from tip to station

@ 3:45PM

350

350°C



### Control via new **User Managment**

- 3 stages of User Management:
- ✓ Admin: Full Function Control & Total Access to connectivity features
- Unlocked User Full Function Control
- ✓ Locked User: Limited Access depending on task

**e 6** 

Standby

80

Pencil WXPPMS

350°C

Tip RTM 004 B

\ Settings /

00000

45PM

350

350°C

Pencil WXUPMS

Tip RTM 032 S



### Smart Control via WXsmart app

- ✓ Mobile monitoring with realtime power and temperature graph via tablet or mobile phone
- Temperature adjustments, iron on/off and color change
- Supervision via intuitive dashboard on PC monitor or control screens
- Remote Lock Function for -Smart Soldering Tools -Smart Soldering Tips







### Control via own system (MES integration)

✓ MQTT Broker

✓ All parameters as JSON structure



The WXsmart station can be remotely controlled via Weller Smart Control App. With Total Process Control (TPC), the WXsmart offers maximum connectivity and traceability desktop or remote via tablet or smartphone app.



Book a free demo: wxsmart@weller-tools.com

## WX smart ~ safe 🖨

The first hand soldering system with built-in cyber-security to prevent costly downtimes



## **Highest Cyber Security**

- ✓ Highest security standards (TLS encryption)
- ✓ Two-Factor authentification (2FA)



## Less risks

- $\checkmark\,$  Running out from one device station in the system
- $\checkmark~$  No data skimming in sensitive industries



# 6 ≈ 180

350°C

Weller

Weller

## Higher productivity and efficiency

✓ Cyber attacks can cause heavy and expensive damage

Weller

- Prevention of downtimes
- Less system / process failures
- Less production stop

## Further safety benefits of WXsmart

Beyond cyber security, WXsmart offers additional safety factors in the soldering process as well as in handling:

- ✓ Heat-proof display for damage protection
- ✓ Patented ESD safe
- ✓ Patented LED ringlights



000 0000 11

Book a free demo: wxsmart@weller-tools.com

# WX smart ~ Auto-Calibration

Captures accurate data and documentation by automatically re-adjusting its soldering calibration for strong auditing.

## WCU – Weller Calibration Unit in Weller High **Precision Temperature Measurement Device**

### Makes calibration easier than ever before:

- ✓ High precision thermometer provides quick response of temperature measurement
- Integrated Calibration Counter
- ✓ Long Life Sensor (up to 50 measurements)
- ✓ Similar use of thermocross and thermocouple Typ K possible (two outputs)
- High mobility thanks to battery powered device



## Main benefits using WCU

- Documentations for Audits and **Quality Management**
- Traceability of calibration process
- Real time data
- Calibration via RS232
- Automatic Tip Offset



## **Fast and Easy Measurement**

Effortlessly auto-calibrate in less than 10 seconds, ensuring the operator can focus on the important soldering task with a precise temperature for best productivity.

This unique Auto Calibration Eco System of WXsmart and the Temperature Measuring and Calibration Device WCU is connecting the dataflow between different devices and works automatically, so no manual intervention is needed.

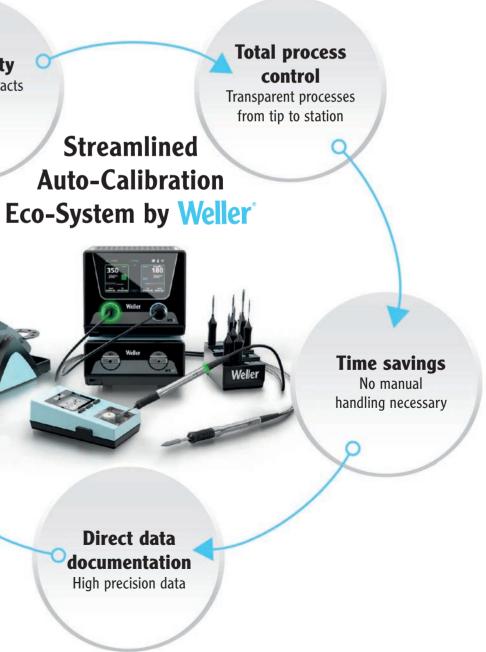
> Traceability Digital dataextracts for audits

> > **Streamlined Auto-Calibration**

Visual process control

0

**Direct data** documentation High precision data



**WX** smart Connecting the Future of Soldering



## Tip Holder

## Intelligent Tips & Tools



## Are you ready for

# WX smart?

## **CONNECTING** THE FUTURE OF SOLDERING





Book a free demo: wxsmart@weller-tools.com

### GERMANY

Weller Tools GmbH Carl-Benz-Straße 2 74354 Besigheim

Tel: +49 (0) 7143 580-0 Fax: +49 (0) 7143 580-108

©2022, Apex Tool Group LLC T0055748400 / 04.13

### USA

Apex Tool Group, LLC 670 Industrial Drive Lexington, SC 29072

Tel: +1 (800) 688-8949 Fax: +1 (800) 234-0472

### CHINA

Apex Tool Group Room 302A, NO 177 Bibo Road Shanghai 201203

Tel: +86 (21) 60880288 Fax: +86 (21) 60880289

## www.weller-tools.com/wxsmart