

OVERVIEW

The TAP Controller from SDS Industries offers a full-featured set of capabilities to enable quick and easy operation of high-temperature kilns, ovens, and furnaces.

TAP features a 4.3" color, resistive, touchscreen display coupled with an easy-to-understand and user friendly graphical user interface. This makes historically cumbersome tasks, such as schedule creation, fast, simple, and error free. In addition to the built-in capabilities, TAP can be paired with its companion iOS or Android mobile application, yielding nearly complete remote control from anywhere with a network connection.



FEATURES AND BENEFITS

Compatible with any relay controlled 120/240VAC power kiln, oven or furnace

- » Capable of controlling any electric kiln, oven, or furnace regardless of manufacturer

PID control algorithm

- » Customizable PID parameters ensure strict temperature profile following characteristics

4.3" Resistive Touch Color GUI

- » Intuitive User Interface reduces operator errors
- » Simplified and error-free data entry and review

Wired and Wireless Network Interface

- » Seamlessly connect to a wireless network, unlocking nearly complete remote control through TAP Kiln Control Mobile
- » Push notifications to alert you to critical changes

Unlimited Firing Schedules and Segments*

- » Theoretically unlimited schedule storage, all accepting alpha-numeric naming
- » Theoretically unlimited schedule segments

Firing/Event Logging and Diagnostics Data

- » Historical and real-time firing log review
- » Off-loadable, CSV format, firing data
- » Event and Error Logging aid in isolation of issues
- » Continuous recording of critical component diagnostics supporting preventive maintenance

Preventive Maintenance Settings

- » Get notified when critical components are approaching end of life
- » Create a structured preventive maintenance routine to fix potential issues before they manifest

Multi-Zone Control

- » Control up to 3 independent zones

Panel Mount

- » Non-volatile memory for data retention
- » Over-temp safety shutdown

SPECIFICATIONS

Power Input

- » Operating Voltage: 24VAC +- 10%
- » Operating Current: 500mA
- » Power: 12VA

Sensor Inputs and Operating Range

- » Type K: -454 to 2500F
- » Type R: -58 to 3214F
- » Type S: -58 to 3214F

Process Control Outputs

- » Number of Element Control Outputs: 3
- » Number of Auxiliary Outputs: 2
- » Number of Safety Outputs: 1
- » Output Voltage: 12VDC
- » Max Simultaneous Output Current: 2A

Environmental Operating Conditions

- » Operating Temperature: 0 to 170F
- » Non-Operating Temperature: -30 to 205F
- » Relative Humidity: 0 to 90%, non-condensing

Accuracy

- » Calibration Ambient Temperature: 77F +- 5 (25C +- 3)
- » Calibration Accuracy: +- 0.1% of span, +- 1C at calibrated ambient temperature

Real-Time Clock with Battery Backup

- » Field replaceable lithium battery - CR1220

Data Logging, Retention, and Access

- » Local data logging - 60 second intervals and profile transitions
- » File Types: CSV
- » Transfer: USB or Email, On-Demand
- » Storage: 220MB internal

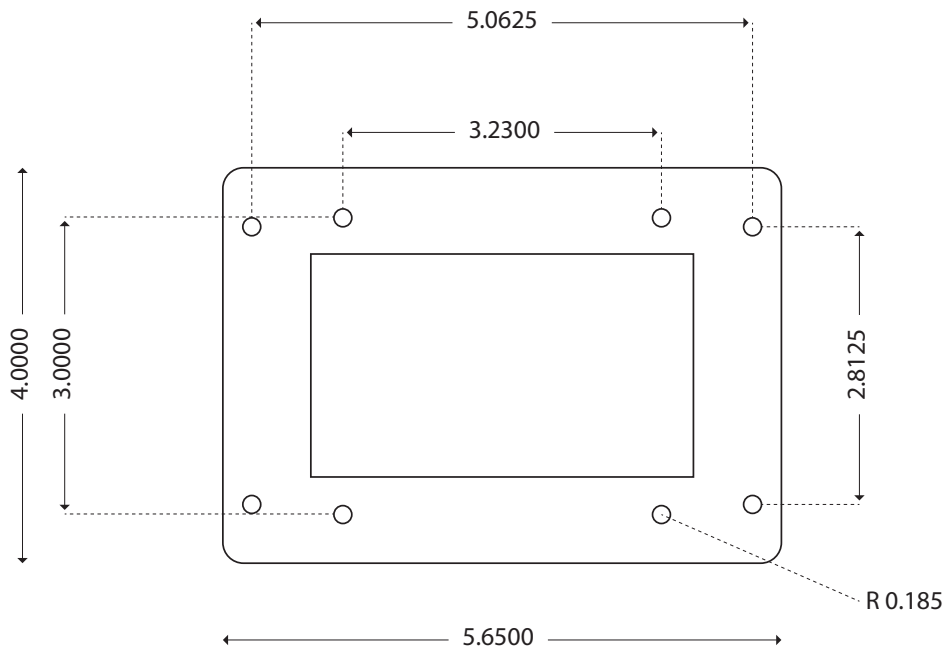
RECOMMENDED INTERFACE COMPONENTS

Manufacturer	Part Number	Description
TE Connectivity AMP Connectors	3-643813-6	CONN RCPT 6POS IDC 22AWG
TE Connectivity AMP Connectors	3-643813-7	CONN RCPT 7POS IDC 22AWG

RECOMMENDED PRODUCTION TOOLS

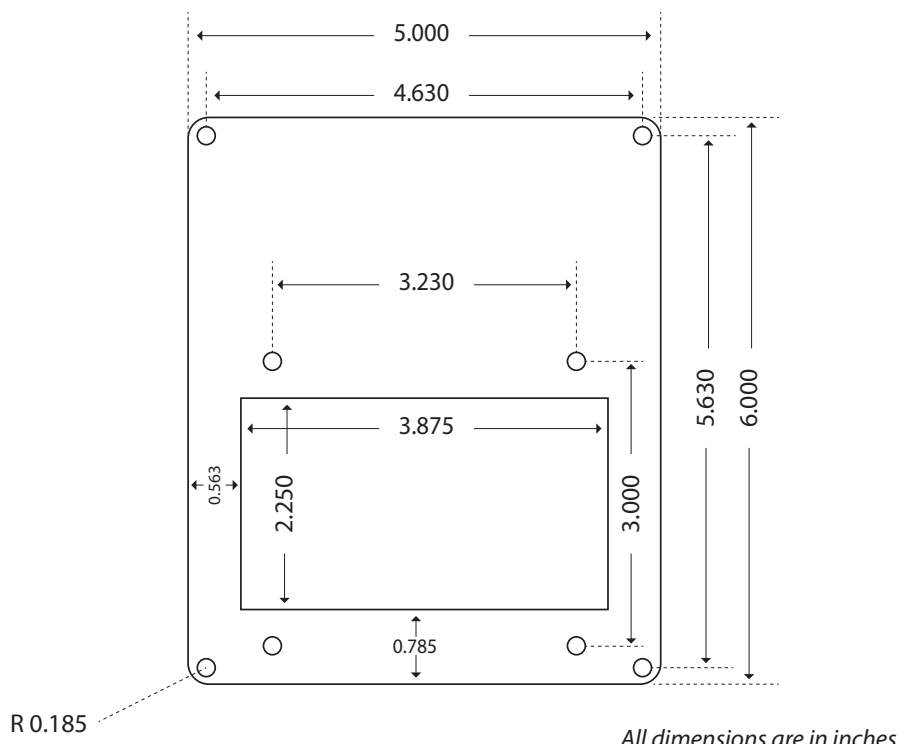
Manufacturer	Part Number	Description
TE Application Tooling	58074-1	Hand Crimper
TE Application Tooling	58246-1	HEAD ASSEM TOOL FOR MTA-100 RECP

DIMENSIONS - 3 KEY CONTROLLER EQUIVALENT



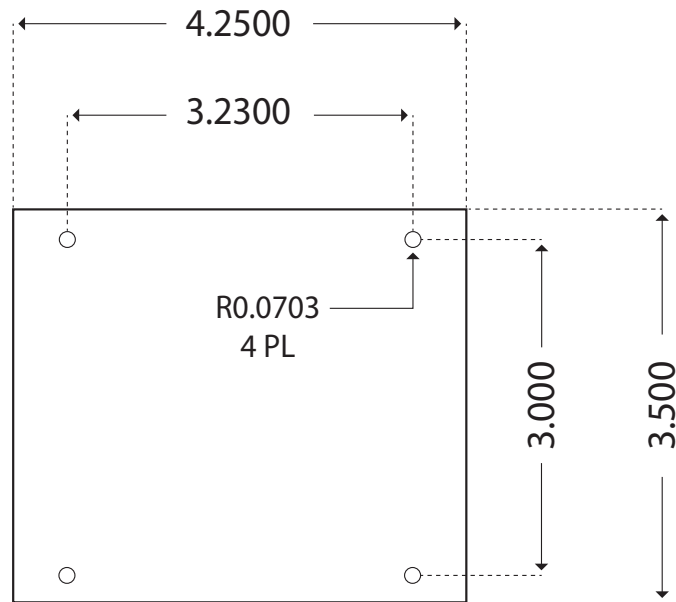
All dimensions are in inches

DIMENSIONS - 12 KEY CONTROLLER EQUIVALENT



All dimensions are in inches

TAP CONTROLLER DIMENSIONS



TOP VIEW

All dimensions are in inches

HOW TO ORDER

TAP Controller orders can be placed through kilncontrol.com/shop by selecting the TAP Controller product. Retail controllers can be configured with a 3-key equivalent or 12-key equivalent faceplate. All retail controllers come with a wiring harness pigtail enabling integration into legacy control boxes or new builds.

TAP Controller Conversion Kits are available through kilncontrol.com/shop. Conversion Kits offer an alternative method to upgrading legacy control systems to a TAP Controller. Conversion Kits are available to retrofit any existing relay-controlled kiln, oven, or furnace. All Conversion Kits make use of the pre-existing power, control, and sensor components. These solutions are fantastic for users that have kilns, ovens, or furnaces with a digital controller but want to upgrade to the full features and flexibility that TAP offers.

Wholesale orders can be arranged by emailing info@kilncontrol.com or calling 571.317.1494.

Configuration options include faceplate/no faceplate, faceplate powder coat color, and wiring harness pigtail inclusion/non-inclusion.