

OVERVIEW

The TAP II Controller from SDS Industries offers a full-featured set of capabilities for kilns, ovens, or furnaces that require only a single temperature sensor and control of a single heating element.

TAP II features a 4.3" color, resistive, touchscreen display coupled with an easy-to-understand and user friendly graphical user interface. TAP II provides a limited feature set from the built-in display, and focuses more closely on providing monitoring and control via the TAP Kiln Control Mobile application. TAP II utilizes embedded wireless capabilities to expose the full features of the controller to the user through the mobile application. Further, TAP II focuses on more simplified applications that require only a single sensor input and a single controllable output.



FEATURES AND BENEFITS

Compatible with any relay controlled 120/240VAC 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
- » True PWM output capable of switching every 16ms

4.3" Resistive Touch Color GUI

- » Intuitive User Interface simplifies data entry and control while reducing operator errors

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

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

Process Control Outputs

- » Number of Element Control Outputs: 1
- » 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 - Customizable intervals
- » File Types: CSV
- » Transfer: Email, On-Demand
- » Storage: 220MB internal

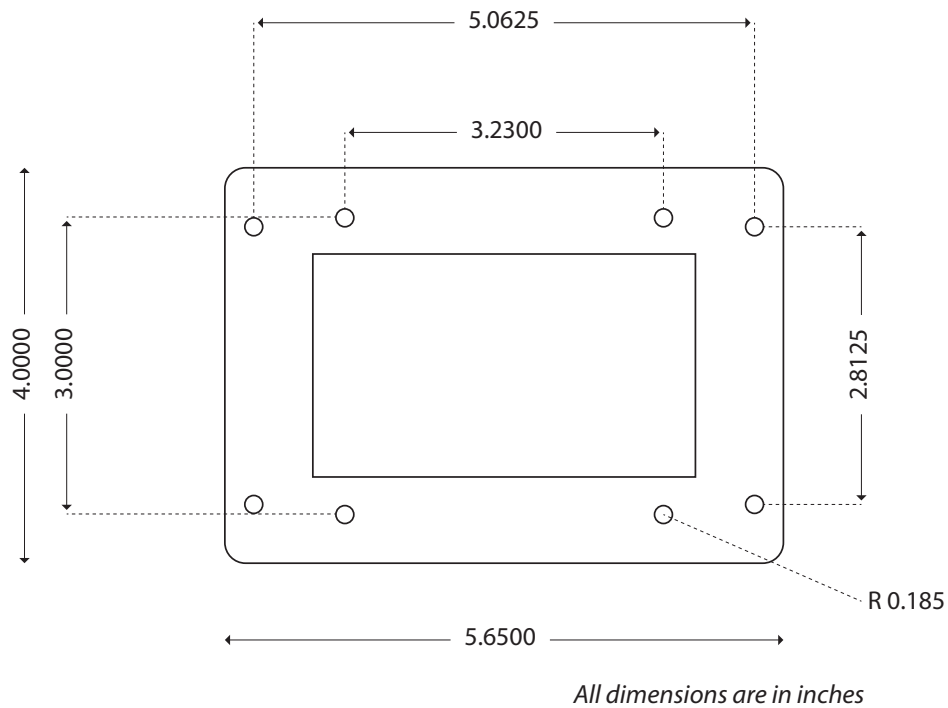
RECOMMENDED INTERFACE COMPONENTS

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

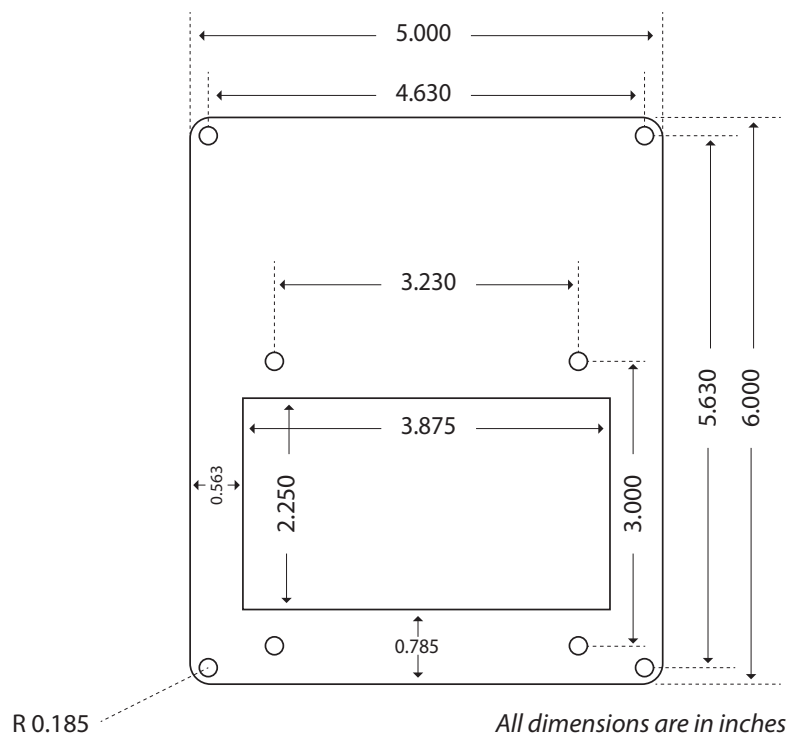
RECOMMENDED PRODUCTION TOOLS

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

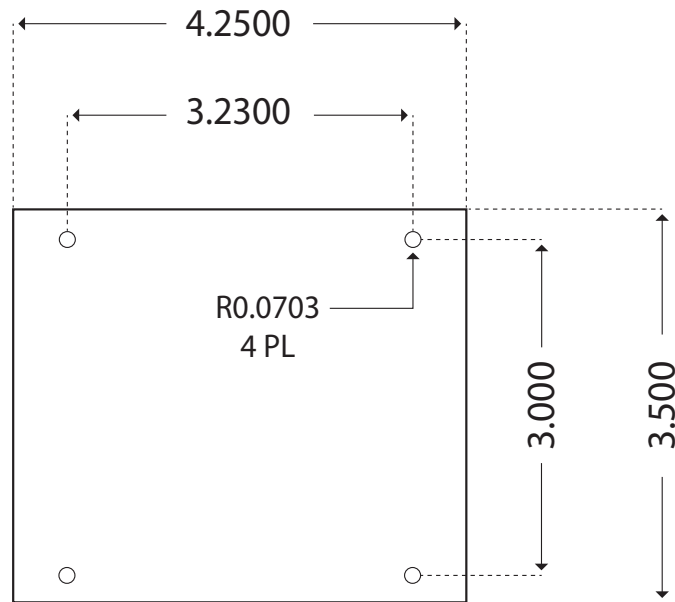
DIMENSIONS - 3 KEY CONTROLLER EQUIVALENT



DIMENSIONS - 12 KEY CONTROLLER EQUIVALENT



TAP II CONTROLLER DIMENSIONS



TOP VIEW

All dimensions are in inches

HOW TO ORDER

TAP II Controller orders can be placed through kilncontrol.com/shop by selecting the TAP II 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 II Controller Conversion Kits are available through kilncontrol.com/shop. Conversion Kits offer an alternative method to upgrading legacy control systems to a TAP II 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 II 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.