Temp-Taker® 4 – Full Specifications 2017-06-06 (new features in blue)

♦ Temperature Sensing

Device Range	-310°F to 770°F (-190°C to 410°C)
Accuracy	±1.0°F (0.56°C) with included NIST-Traceable factory-calibrated standard probe
Units	°F or °C (user selectable)
Resolution	1°, 0.1°, or 0.01° (user selectable)
Field Calibration	Perform thermometer calibration following on-screen instructions; Restore factory calibration at any time
Probe Requirements	Accepts most K-Type thermocouple probes with standard mini connector; **Includes** high-quality penetration-style probe (see section on standard probe specs)

♦ Special Device Features

Auto Temp	Device detects when probe tip has been inserted into product, automatically takes temperature measurement and logs results (when appropriate)
Super-Fast Temperatures	New proprietary predictive algorithm with temperature stability detection typically produces measurements in under 1 second (with fast-response probe); Accommodates fast-response probe type or medium probe type
False Measurement Detection	Probe-temperature monitoring algorithm detects and flags temperature measurement falsification
Insufficient Time Lapse Detection	Background algorithm monitors the elapsed time between each In-Range food temperature measurement; Measurements that occur too quickly one after the other are flagged; This feature helps supervisors identify workers that do not clean the probe shaft between each measurement
Product Tracking	Tracks up to 10 different products through the following three processing levels: 1. Receiving cases into freezer 2. Moving cases from freezer to thawing 3. Piece consumption (e.g. moving pieces or bags from a case to a prep table) Enforces FIFO (first in first out) storage method; Maintains log of product inventory; Automatically assigns tracking case numbers; Lost cases can be reported

♦ General Device Features

Fast Scrolling	Performs fast scrolling through long lists (20 items/second); Shortcut keys advance from first item to last item and from last item to first item
Audio/Visual Alarms	108dBA buzzer and 3-color/750mcd LED provide audio/visual alarm notification
Timers	3 independent Timers (countdown or count up); Countdown timers can be set up to 9,999h 99m 00s; Countdown timers have reset memory with optionally enabled auto-reset; Each Timer can be assigned a custom name (e.g. "Misc.", "Half-n-Half", "2% Milk")
Spot Check Temps	Large-display/free-running digital thermometer with optionally enabled Statistics Mode which displays continuously-updating MAX/AVG/MIN temperature readings
Other	Clock mode; Event counter keeps log of current-day's activity; 'Quick Help' messages; Memory usage info; Flip display upside-down feature (allows one-handed operation with optionally available non-cabled probe)

♦ Device Memory

Type	EEPROM with >1 million write cycles and 40-year data retention (no power required)
Capacity	Stores >7,000 events before needing to upload data to Temp-Taker® software application

♦ **HACCP Functionality**

Hot/Cold Holding	Measure/record temperatures of food in Hot/Cold Holding lines; Device automatically evaluates if the temperature is within the applicable safe zone; If the temperature is Out of Range, Corrective Options are provided; Available Features: Up to 100 custom **Safe Holding Zones** can be created; Each zone can be assigned customizable Corrective Options; Up to 40 custom **Corrective Options** can be created, each with up to 2 custom 135-character **User Directives** and the following **Corrective Session** parameters: (1) start/continue session?, (2) session duration, (3) require supervisor PIN?, and (4) require immediate data upload?; Enable one or two (back-to-back) Corrective Sessions; Session expiration reminder alarms
Cooking	Measure/record temperatures of food undergoing Cooking; Device evaluates if the temperature is within the target range; If the temperature has not reached the required minimum, the food item's cooking process continues and the user is able to take more temperatures on the same item later on
Cooling	Support for the following food cooling processes: **2-stage hot-food cooling**, **1-stage hot-food cooling**, and **room-temp food cooling**; Device applies the procedure of the selected process when taking temperatures; Available Settings: Minimum start temperature for hot-food cooling, Duration and target temperatures of cooling stages, Reminder-alarm interval (for taking periodic temperatures), Re-heat and discard-item corrective options (for food not cooling down fast enough)
Time In Lieu of Temperature (TILT)	Support for **straight TILT** and **hybrid TILT/Holding** policies; Features: Configurable target temperature range required to start TILT Period; Configurable TILT Period duration; Ability to log item as 'Consumed' or 'Discarded' any time during the TILT Period; Reminder alarms can be configured to activate before each item's TILT Period expires; Optionally record additional temperature measurements *during* a food item's TILT Period
Question Checklists	Up to **2,000** different custom 135-character Questions can be downloaded to a device; Can optionally **branch to other Questions** based on answer to current question – typically used to program custom corrective options when answer (or temperature) is undesired; Questions can include audio/visual alerts, comments, and option to log or not log answer; Each question can have one of the following answer types: • Yes/No • Custom single answer (select from up to 10 custom 21-character answers) • Custom **multiple** answers • **Temperature measurement** (i.e. the 'question' is answered by taking a Temp) • Date (e.g. Mar 18, 2016) • Numeric (integer or decimal) with optional custom answer units (e.g. "PPM"); Range: -32,767 to 32,767

♦ **Programming**

Programs	Up to 450 custom Programs can be downloaded to a device where each Program contains up to 40 different members; A Program member consists of one of the following: an Item (e.g. Tomato), a Question, or a Process Group; A Process Group consists of up to 250 Items or Questions; Each Item that is added to a Program (either directly or within a Process Group) is assigned a HACCP Process that determines how it is used
Items	Up to **2,000** different items can be created; Each item is given a name (up to 21 characters long) and can be associated with multiple HACCP Processes; Items associated with the Hot/Cold Holding Process can be configured to capture temperature measurements using the attached probe or via keypad entry
Users	Up to 250 different users can be created and downloaded to a device; Each user name can be up to 21 characters long; See Security specs for more user-related information

♦ **Settings & Data**

Settings	Software installs with sample HACCP settings that are easily customizable; A calendar-based user interface is available to facilitate *periodic* changes on recurring food menus
Data	Handheld device generates and stores event data (e.g. temperature measurements and answers to checklist questions); data is uploaded at a convenient time (via USB) to a tablet, laptop, or PC running the Temp-Taker® software; Software displays up to **21 data fields** for each logged event, including: Unique Event ID, Event #, Seq #, Unit Serial Number, Unit Name, User, Program Group, Program, Process Group, Question (full), Item/Question (name), Date, Time, Answer (full), Outcome, Temperature Measurement, Target Temperature, Temperature Difference, Zone Name, Comment, and Verified By; All data fields, except Comment and Verified By, are non-modifiable
Reporting	Data reports are generated in spreadsheet format; Show/hide and reposition any data column; **Related events are automatically grouped together** and in the correct sequence (even if other events were logged within the same time frame); Configure up to 10 data filters simultaneously; **Save up to 20 custom report configurations**; Print or export reports in PDF, CSV, or XML formats
Headquarter Control	Update device settings at satellite locations (e.g. a restaurant chain) using **Auto Import**; Receive data reports automatically from satellite locations using **Auto Report**; Auto Import and Auto Report features require **NO MONTHLY FEES**; Usage requires a local network or cloud storage folder (e.g. Google Drive, OneDrive, or DropBox)
Updates	Software and device firmware updates are received automatically via the Internet
Security	Security features can be enabled/disabled at any time; Users can be assigned 1 of 3 security access levels: Admin (full access), Supervisor (configurable access), or User (lowest); When security features are enabled, each user creates a **4-digit PIN** during first login; Logging into the software application grants access according to the user's assigned security level; Temp-Taker® devices have the following optionally enabled security PIN features: Require users to log in with their PIN when taking temps, require a supervisor PIN to be entered before gaining access to certain device settings (e.g. performing a probe calibration), and require supervisor PIN to be entered for select custom corrective options (e.g. discarding food); Important security-related events (e.g. resetting a user PIN) are automatically logged

♦ **Mechanical**

Impact Resistance	Tough thermoplastic polymer blend easily **endures 6-ft drops** onto concrete
Water Resistance	Protective coating encases internal electronics making device immune to high-humidity environments and splash resistant (IP54)
Keypad	Snaptron RK-series metal dome (rated for 5,000,000 cycles)
Probe Storage	Integrated probe storage compartment protects probe shaft and tip when not in use; **Easy access to compartment interior** facilitates periodic cleaning
Probe Connector	Dedicated compartment protects probe connector when device is dropped or cable is pulled hard
Magnetic Attachment	Equipped with two 0.6" (15mm) diameter neodymium magnets for easy and secure attachment to flat steel surfaces
Other Attachment	Integrated wall mounting and lanyard/hook holder features
Rubber Feet	4 neoprene rubber feet prevent sliding on inclined surfaces
Device Dimensions	3.8 W x 5.6 H x 1.1 D inches (97 x 142 x 28 mm) - dimensions do not include probe
Weight	0.46lb (210g) – without probe and batteries
Display	2.8" (1.5mm) monochrome graphical LCD with 128 x 64 pixels
Operating Temp Range	-4°F to 158°F (-20°C to 70°C)

♦ **Power**

Type	Requires 2 AA (1.5V) batteries; Accepts 4 AA (included) for extended battery life;
Battery Life	1,400 hours continuous service with 4 low-cost alkaline batteries (e.g. Energizer E91); Typical battery life: 6-9 months (using default power conservation settings)
Conservation	Configurable auto-off and automatic LCD brightness reduction features

♦ **System Requirements for Temp-Taker® Software App**

Computer/processor	1 gigahertz (GHz) or faster x86-bit or x64-bit processor
Operating System	Runs on 32-bit and 64-bit versions of Microsoft Windows 10, 8.1, 8, and 7 operating systems; Also runs on Windows Embedded POSReady 2009, POSReady 7, and 8 Industry
Memory	1 gigabyte (GB) RAM
Hard Disk	2 gigabytes (GB) available
Display	800 x 600 or higher resolution monitor

♦ **Miscellaneous**

Certifications	FCC; RoHS; NIST-Traceable Factory Calibration
Communication	USB 2.0 (cable included); Data transfers at 125,000 Baud
OS Compatibility	Temp-Taker® software application runs on Windows XP, Vista, 7, 8, and 10; Also runs on Windows Embedded POSReady 2009, POSReady 7, and 8 Industry
Warranty	One year on device; 90 days on probe

♦ **Included Standard Probe**

Type	Fast-response penetration-style K-Type probe with mini connector
Range	-58°F to 572°F (-50°C to 300°C)
Wires	Precision thermocouple wires with SPECIAL LIMITS OF ERROR
Sheath	Material: 304/316 Stainless Steel; Length: 4" (10cm); Diameter: 0.125" (3.2mm), reduces to 0.07" (1.8mm) near probe tip
Cable	PVC jacket with 0.15" (3.8mm) diameter; Coiled portion 6.5" (16cm) long in relaxed position, stretches up to 4ft (1.2m)
Handle	Delrin material 1¾" (4.4cm) long with handle-to-cable SS-spring strain relief