

## Food Safety Temperature Kits

- Kits to suit every budget.
- Components selected for value and performance.
- Instruments and probes stored safely and securely.
- From the specialists in temperature.

ECEFast was the first company in Australia to introduce a range of Food Safety Temperature Kits combining infrared and contact thermometers. The two larger kits use test caps and a cross checking process to verify all components are working correctly. All kits include our exclusive IR/contact checker.



TK-MAXIKIT561



TK-MAXIKIT-A

Rugged Aluminium case closed foam cell insert

### Part No TK-MAXIKIT-A

- Comark KM-C21 thermometer -40 to +150°C
- PX23, PX25 colour coded insertion probes
- TX24, TX25 testcaps for 3°C & 63°C
- CH-TK-CHECKER for IR verification
- CH-AZ-BG32-FOOD calibrated IR -20 to 320°C
- CH-CX-PT100T-R sanitary probe wipes\*

***"customise components to suit your application"***

\* Refills available P/N CH-CX-PT100T-R

The MAXIKIT is designed for larger installations with a variety of applications such as a supermarket or large food preparation facility. Two colour coded probes help avoid cross contamination and test caps and checker allow kit verification in a few minutes. Other probes such as between pack, air and surface probes are optional, and alternative IR thermometers can be included such as Fluke 561, Fluke FoodPro or CH-AZ-TN-COMBO



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ISO 9001  
Quality  
Endorsed  
Company  
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## Part No: TK-MIDIKIT-A

- Comark KM-C21 thermometer -40 to +150°C
- PX22L insertion probe to suit
- TX24L testcap for 3°C
- ST9212B calibrated backup thermometer
- CH-AZ-BG32FOOD calibrated IR -20 to 320°C
- CH-CX-PW100T sanitary probe wipes
- CH-TK-CHECKER for IR verification

The MIDIKIT is designed for medium sized food preparation facilities and larger mini-markets and food stores. It contains contact and infrared thermometers as well as a calibrated "backup" pocket thermometer. The case assures safety of the components and sanitizing wipes are included for the probes. Wall mounted dispensers and refills for these wipes are available. Again, optional components can be included in this kit - see [www.ecefast.com.au](http://www.ecefast.com.au) .

*"customise components to suit your application"*



*Rugged Aluminium case  
closed foam cell insert*



*TK-MICROKIT*

## Part No: TK-MICROKIT

- Includes two calibrated pocket -50 to 150°C waterproof thermometers
- CH-AZ-BG32FOOD calibrated IR -20 to 320°C
- CH-TK-CHECKER for IR verification
- Carry case to suit.

The MICROKIT is an economical kit containing IR and contact thermometers with cross checker. There are two calibrated pocket thermometers so one can act as a backup during kit calibration or in event of breakage. The kit suits small food stores, coffee shops and local fast food outlets.

# Major Kit Components and Alternatives



KM-C22

- Range -50 to +150°C (ambient to -20°C)
- Accuracy  $\pm 0.3^\circ\text{C}$
- Waterproof - 10 years battery life
- Count down timer
- Suit test caps KM-TX series & probes KM/PX series



KM-C21

- Range -50 to +150°C (PX probes) -200 to +400°C (TX probes)
- Accuracy  $\pm 0.3^\circ\text{C}$  Type T  $\pm 0.5^\circ\text{C}$  thermistor
- Anti Microbial BioCote surface treatment
- Battery life 7000 to 14,000 hours
- Suit test caps KM-TX series & probes KM/PX/PT series



FK-561

- Range -20 to +320°C
- Certified at -18°C & 100°C
- Fixed emissivity
- Economical

CH-AZ-BG32-FOOD



- Range -40 to +550°C infra red
- Type K thermocouple input socket
- Laser sight 12:1 optics
- Max, min & diff modes
- Response 500 mSec

- IR Range both models -30 to +200°C
- Contact range - FoodPro Plus only -40°C to 200°C
- Distance to spot 2.5:1 on infra red
- Working distance 25 - 250mm
- IP54 washproof - not immersible



FK-FOODPRO  
FK-FOODPROPLUS



CH-AZ-TNCOMBO

- Infra Red -30 to +250°C contact -50°C to +300°C
- Plug-in type K thermocouple socket (probe not included)
- Laser sight & 12:1 optics

- IR Range -30 to +200°C
- Contact range (foldout probe) -55°C to 300°C
- Distance to spot 2.5:1 on infra red
- Max, min & lock modes
- IP54 wash proof - not immersible



CH-AZ-TCT303



CH-ST9212-FOOD

- Range -50 to +150°C (ambient to -10°C)
- Max, min & hold function
- Accuracy  $\pm 1^\circ\text{C}$
- Waterproof
- Food version complete with certificate

- Range -50 to +150°C (ambient to -20°C)
- Waterproof & ruggedised
- BioCote anti-microbial surface treatment
- Reduced tip for fast response



KM-PDT300C

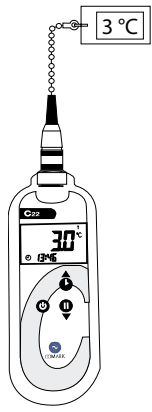


KM-DT400

- Dishwasher proof (non-commercial only)
- Range -20°C to 200°C, reduced tip - fast response
- Accuracy 0.5°C - calibrateable
- BioCote anti-microbial surface treatment

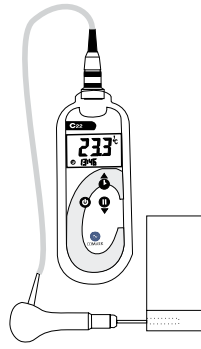
# Accuracy Test Procedure

Accuracy statistics based on measurements at 23 °C ambient temperature



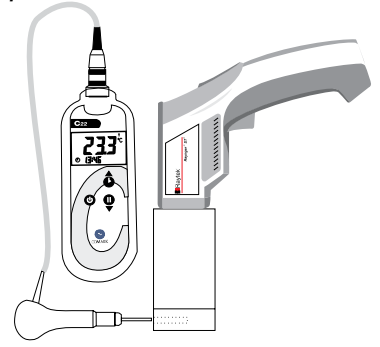
## Step 1

Fix test cap to thermometer & compare temperature (acceptable error 0.5 °C)



## Step 2

Fit probe to thermometer, insert probe into temp. comparator & allow temperature to stabilise



## Step 3

Point Fluke 60 at base of comparator & note variation (acceptable error 2.5 °C)

### Verification of ECEFast TEMPKITS

The procedure above is used to verify that components of the kit are functioning correctly - it is not calibration, or third party comparison. Regulations require regular "third party" calibration of all components.

- We recommend that the complete kit is returned to us for recalibration & checking each 1 to 2 years. Our service department has a control system that can schedule this procedure at nominated sites.
- The test cap holds it's calibration indefinitely - if a variation in readings are noticed - SEND IN COMPLETE KIT FOR CHECKING!

### When Should I Use the Infrared or Contact Thermometers?

The infrared, non-contact thermometer, measures the surface temperature of the product. They are used when the product is in thermal equilibrium - that is when it has been exposed to a set of conditions for an extended period of time. Thus it is appropriate to use for chilled or frozen display cases, freezers & cold storage rooms, cooking & hot food holding where the product has been in place long enough to stabilise temperature.

- It is fast, enabling you to take many readings in a short time rather than a 'few samples'.
- It is non contact so it does not contaminate food, (no sterilising procedures or scrapping of samples necessary).

Readings are of the surface temperature only - you can not measure core temperatures.

Readings are not absolute & in some cases are affected by the surface being measured (example - shiny metals or metalised shiny packaging).

The KM-C21/KM-C22 contact thermometer, measures a temperature along approximately 10mm of the probe tip. The reading is absolute - that means it will be correct in all cases where the probe temperature equals the product temperature. It is very difficult to measure surface temperature with this probe. The probe should be inserted at least 30mm into the product.

- Use to verify a product rejection or to qualify a particular storage problem - make final check with contact probe if infrared indicates a problem.
- Use to measure core temperature (example - to check core temperature of roast meat to verify it is cooked completely as required).
- For temperatures >150°C use model KM-C22 - for temperatures >150°C always use type T probes with this thermometer.

### Tips For The Efficient Use of the Infrared Thermometer

When using the infrared thermometer, make sure that the product being measured fills the entire 'field of view'. Where possible hold the front of the thermometer approximately 150mm from the surface being measured. This will give you a target area of approximately 25mm diameter. For 500 mm the target is approximately 65 mm. (The further you are from the product being measured, the greater the field of view. See the side of the thermometer for field of view information). The FoodPro series is normally used closer to product, & the bright LED indicates the approximate target area.

When measuring packaged products, measure the packaging that is in contact with the product. No air gap! (The packaging medium will in most cases, take on the temperature of the product. The exception is insulated packaging such as polystyrene foam or cardboard).

When measuring shiny plastic packaged products, if a paper label is adhered to the plastic, measure the paper label.

Measure products in place where practical. (the temperature of packaging will increase very quickly when exposed to ambient (room) temperature).

### Use in Freezers

If a few quick readings for a survey are required, then hold the infrared thermometer close to your body (under arm pit) to keep warm in between "snap" readings. An alternative method is to stabilise the infrared thermometer at freezer temperature for at least 20 minutes. If the temperature is too low, the battery or display will freeze & the unit will not function. (first method preferable).