

Reflow Checker (Modular Type) RCX-1 series



Malcom offers New Concept Reflow Oven Measurement System

Add your Choice of Module to RCM-S main unit. (6 points temperature measurement)

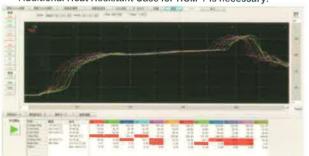
Malcom's Unique Modular System Innovates Reflow Process Control

RCX-S Reflow Checker Memory Unit (6 channels)

- Thermocouple Check function is equipped.
- Memorize up to 20 profiles, making it possible for continuous measurement of some production lines.(Please fully cool down RCX-S Reflow Checker Memory Unit (6 channels) before next measurement.)
- Bluetooth enables Wireless Data Transmission.
- AAA batteries are available. Built-in Battery Monitoring function.

RCX-T Reflow Checker Memory Unit (plus α 6 channels)

- Add RCX-T Reflow Checker Memory Unit (plus a 6 channels) to RCX-S Reflow Checker Memory Unit (6 channels), providing 12 points measurement.
- Can be used as 12 channels to study profiles, trial production and evaluation, for normal production, employed as 6 channels. Additional Heat Resistant Case for RCM-T is necessary.

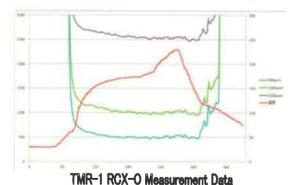


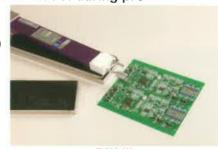


RCX-O Reflow Checker Memory Unit (plus α O₂ Concentration Monitor)

A module to measure O2 Concentration.

- Measure O₂ Concentration of the important point on a PC board.
- Take measurement in the same reflow conditions as that of during production.
- The measurement range is selectable. $(50 \text{ ppm} \sim 5,000 \text{ ppm or } 1,000 \text{ ppm} \sim 10,000 \text{ ppm})$ Additional Heat Resistant Case for RCM-O is necessary





Special Features

- Add your Choice of Module to RCM-S main unit. (6 points temperature measure-
- We offer you Reflow Checker Memory Unit (6 channels, plus a 6 channels, plus a or soldering. Solve troubles of difficult mounting and tempera-O₂ Concentration Monitor and plus α Air Velocity Monitor)
- Simultaneously display Profile and Data of Temperature, Wind Speed, O2 Concentration on the same screen.
- Profile Support function allows for easy profile creation.
- AAA batteries or Lithium Ion battery (option) is selectable on the purchase.
- The newly adopted Bluetooth enables Wireless Data Transmission.
- Memorizing up to 20 profiles increases the efficiency of collecting data.
- Thermocouple Check function avoids measurement before realizing thermocouple disconnection.

TMR-1 Software

Evaluate and control reflow process from different angles, not only temperature control of a reflow oven. The temperature profile prediction function helps smoothly examine a pro-

- Simultaneously display Profile and Data of Temperature, Wind Speed, O2 Concentration on the same screen.
- Profile Support function offers easy profile creation.
- TPD files, the file format of TAM series, are viewable.

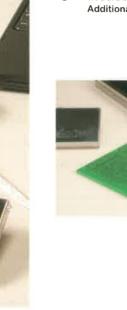
RCX-W Reflow Checker Memory Unit (plus α Air Velocity Monitor)

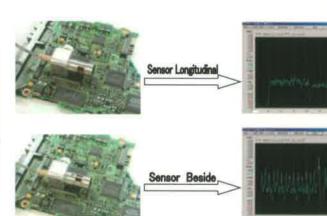
A module for Wind Speed measurement.

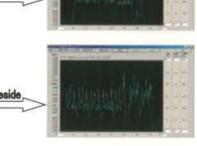
- A wind speed sensor mounted on a PC board measures wind speed of the important
- Take measurement in the same reflow conditions as that of during production.
- Measure wind speed from upper or side directions. Additional Heat Resistant Case for RCM-W is necessary



TMR-1 RCX-W Measurement Data



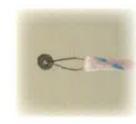




OPTION

Easy Attachment K-Type Thermocouple!

Now "Easy Attachment K-Type Thermocouple" is available. Small copper plate (nickel plated) is welded to a tip of thermocouple. A flat round tip offers easy installation using adhesive ture difference caused by mounting difference. Anybody can attach thermocouples quickly and reliably.



Specifications

RCX-S Reflow Checker Memory Unit (6 channels)

| Measured Temp Range | 0~500℃ *1 | |
|--|--|--|
| Max. Measurement Time | 8 hours *1 *2 | |
| Sampling Time (sec.) /Max. Storage Time | 0.05/4h50min, 0.1/10h40min, 0.2/21h20min, 0.5/48h20min, 1.0/96h40min, 2.0/193h20min, 4.0/386h40min, 8.0/773h20min Arbitrary setup possible | |
| Temp Accuracy | ±1°C | |
| Measurement Points | 1∼6 points | |
| Heat Resistant Connector | Miniature Connector | |
| Input | Thermocouple JIS-K 1kΩ max. (ϕ 0.1, 10m) | |
| Power Supply | AAA batteries Manganese batteries Alkaline battery Ni-MH battery Lithium Ion battery (option) | |
| Outer Dimensions | Main Unit: 55 (W) x 170 (D) x 18 (H) mm Heat Resistant Case: 65 (W) x 245 (D) x 25 (H) mm | |
| Data Transmission Method | USB or Bluetooth | |
| Weight | Approx. 550g (Conveyor Attachment System is not included) | |

^{*1} It is not the heat resistant time of memory unit *2 It is the experimental value by AAA batteries. The max measurement time depends on battery capacity

RCX-T Reflow Checker Memory Unit (plus & 6 channels)

| Measured Temp Range | 0~500℃ *1 |
|--|--|
| Max Measurement Time | 5 hours *1 *2 |
| Sampling Time (sec.) /Max. Storage Time | 0.05/4h50min, 0.1/10h40min, 0.2/21h20min, 0.5/48h20min, 1.0/96h40min, 2.0/193h20min, 4.0/386h40min, 8.0/773h20min Arbitrary setup possible (Synchronized with RCM-S) |
| Temp Accuracy | ±1°C |
| Measurement Points | 1∼12 points (Add to RCM-S) |
| Heat Resistant Connector | Miniature Connector |
| Input | Thermocouple JIS-K 1kΩ max. (φ 0.1, 10m) |
| Power Supply (Supplied from RCM-S) | AAA batteries Manganese batteries Alkaline battery Ni-MH battery Lithium Ion battery (option) |
| Outer Dimensions | Main Unit: 55 (W) x 253 (D) x 18 (H) mm Heat Resistant Case: 114 (W) x 250 (D) x 25 (H) mm |
| Data Transmission Method | USB or Bluetooth |
| Weight | Approx 1000g (Heat resistant Case and RCMS are included.) |

¹ It is not the heat resistant time of memory unit 2 it is the experimental value by AAA batteries. The max, measurement time depends on battery capacity

RCX-O Reflow Checker Memory Unit (plus & O2 Concentration Monitor)

| Max. Measurement Time | | Ni-MH battery: Approx. 40min. *3 Lithium-lon rechargeable battery: Approx. 80min. *3 | |
|-----------------------|-----------------------------|---|--|
| Sampling | Time (sec.) | 0.05, 0.1, 0.2, 0.5, 1.0, 2.0, 4.0, 8.0 Arbitrary setup possible (Synchronized with RCM-S) | |
| O ₂ | Measurement Principle | Zirconia Limiting Current method | |
| | Measured Range | 50ppm~5000ppm or 1000ppm~10000ppm (Specified when ordering.) | |
| | Measurement Accuracy | 50ppm~5000ppm: ±5%FS 1000ppm~5000ppm: ±10%FS 1000ppm~10000ppm: ±5%FS | |
| Power Su | upply (Supplied from RCM-S) | Ni-MH battery (AAA batteries x 3pcs.) Lithium-Ion rechargeable battery * 4 | |
| Outer Dimensions | | Heat Resistant Case for RCX-O: 65 (W) x 383 (D) x 25 (H) mm (Protrusions are not included.) | |
| Weight | | Approx. 950g (Conveyor Attachment System is not included) | |

³ The measured temp range and the max

4 Aikaline battery and Manganese batteries can not be used

AAA batteries or Lithium-Ion rechargeable battery must be specified when ordering

RCX-W Reflow Checker Memory Unit (plus & Air Velocity Monitor)

| Measured Wind Speed Range | 0.1~5m/s |
|---------------------------|--|
| Measurement Accuracy | (5%+0.1m/s) of the indicated value |
| Sampling Time (sec.) | 0.5 |
| Measurement Points | 1point |
| Outer Dimensions | Main Unit: 55 (W) x 285 (D) x 18 (H) mm Heat Resistant Case for RCX-O: 65 (W) x 383 (D) x 25 (H) mm |
| Weight | Approx. 760g (Conveyor Attachment System is not included) |

^{*} All specifications are subject to change without notice.

Soldering Process Devices LED Manufacturing Devices Bio-technology Products

Malcom Company Limited

15-10, Honmachi 4-Chome, Shibuya-ku,

Tokyo 151-0071 Japan

Tel: 81-3-3320-5611 Fax: 81-3-3320-5866

E-mail: whq@malcom.co.jp

Representative



MEGURO INSTRUMENTOS ELETRÔNICOS LTDA.

Rua Nilo, 251 - Aclimação - CEP 01533-010 - São Paulo-SP Fone: (11) 3284-5322 - Fax: (11) 3284-4704 www.meguro.com.br / meguro@meguro.com.br