Thermo Recorder

T&D

For Food Safety Management (HACCP Systems)

Wireless Core Temperature Data Logger

Push Wireless

RTR-61

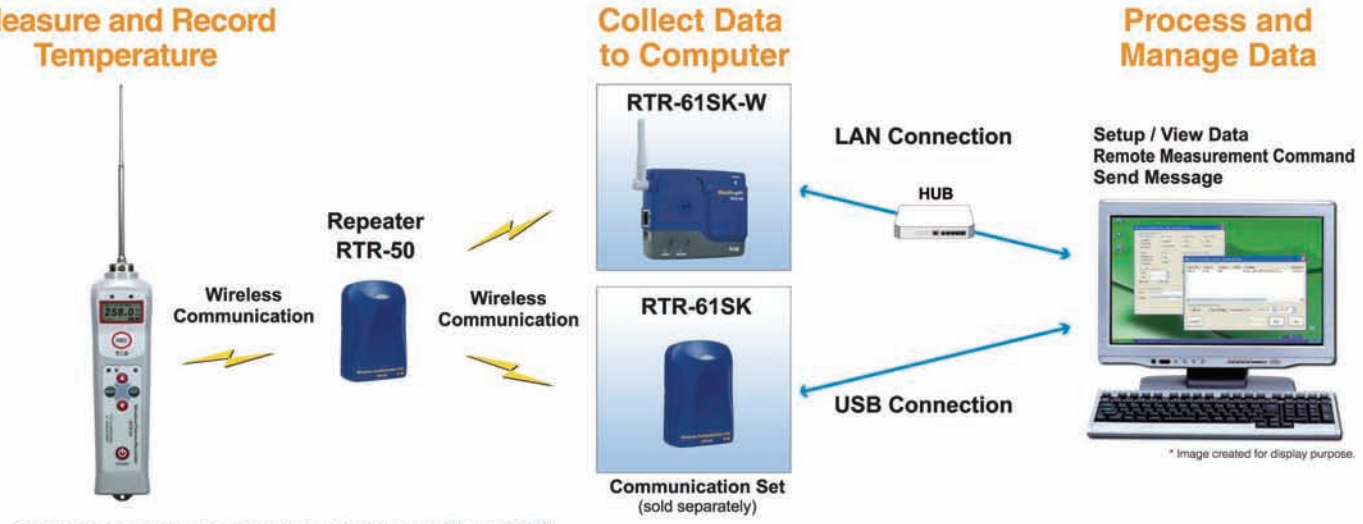
Measure and Record -25˚C to 235˚C
Simple Push Button Operation
Easy to Read Screen
Send Messages and Measurement Commands from PC
Temp Stabilization Function Reduces Humen Error

T&D CORPORATION

Wireless Core Temperature Data Logger *Push Wireless* RTR-61

Expand the Possibilities

With its built-in short range wireless capability the RTR-61 “Thermo Recorder Push Wireless” makes it possible to not only carry out wireless communication but provides a simplified and effective way to collectively manage a multiple number of RTR-61 units.
Please note that in order to carry out wireless communication, it is necessary to use our specially designed software set “Push Wireless Communication Set, RTR-61SK / RTR-61SK-W”. (sold separately)



- The wireless communication range, if unobstructed and direct, is about 100 meters [330 ft].
- If necessary, please place Repeater(s) between the Remote Unit(s) and the Base Unit.
- Repeaters are Separately.

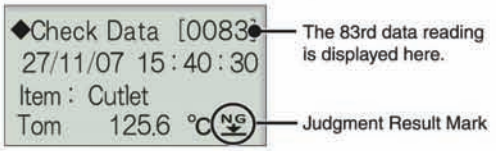
Measure / Record Food Core Temperature during Processing

The RTR-61 is a handy-type device which acts both as a thermometer and a temperature recorder that has been designed to easily measure and record the internal temperature of food items and liquid temperature using a needle-type sensor. This product has been designed to meet IP64 standards (splash resistant; rated for use in daily life). It is suitable for use in the food production industry, especially temperature management for HACCP.

One-Push Simple Recording

Simply pressing the <REC> button on the RTR-61 allows the user to record not only the Temperature but also the Date/Time, Measurement Item, User Name and Judgment Result of Measurement. The RTR-61 unit can record and store up to 1,800 data readings. The details for the measured data can also be checked in the display.

Data Details Confirmation Window

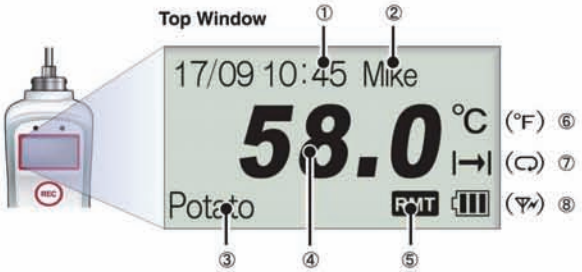


Judgment Result Mark

OK ···Judgment OK NG ···Lower Limit Error ···Upper Limit Error

Easy-to-Read LCD Display

The RTR-61 is designed with a high quality graphic LCD display with a resolution of 132 X 64 pixels. The LCD backlight allows the display to be easily read even in low light. Also, the contrast function can be easily adjusted for better viewing.



① Current Date / Time (Date / Month / Hour / Minute)
② User Name ③ Item Name ④ Current Temperature ⑤ Remote Mode
⑥ Unit of Temperature [°F or ℃] ⑦ Recording Mode [One Time or Endless]
⑧ Battery Status or Wireless Communication in Progress

Wait for Constant Temp Function

When measuring temperature, if a change in temperature occurs which is greater than that which was set as the allowable temperature change value set in the application, the temperature will not be recorded until temperature stabilization has been achieved (up to 15 seconds).

Four Sensor Types to Meet your Needs

To meet customer needs, we offer four types of Sensor-Unit sets. For the “All-in-One Type Set”, the sensor is directly attached to the RTR-61 unit. For the “Separate Type Set”, the sensor has a handgrip and cord, making it easy to read the LCD display even in steam. Moreover, the sensor length can be selected from either “Short” or “Long” for each type.

Reliable Backup Function means No Data Loss

The unit incorporates a battery life warning function, which informs the user when it is time to replace the battery. When the battery power becomes low, all normal operations will stop in order to protect the data.

About the Communication Set

Select Base Unit to meet your System (USB or LAN)

USB RTR-61SK

For controlling the RTR-61 from a Base Unit connected to your computer with a USB cable

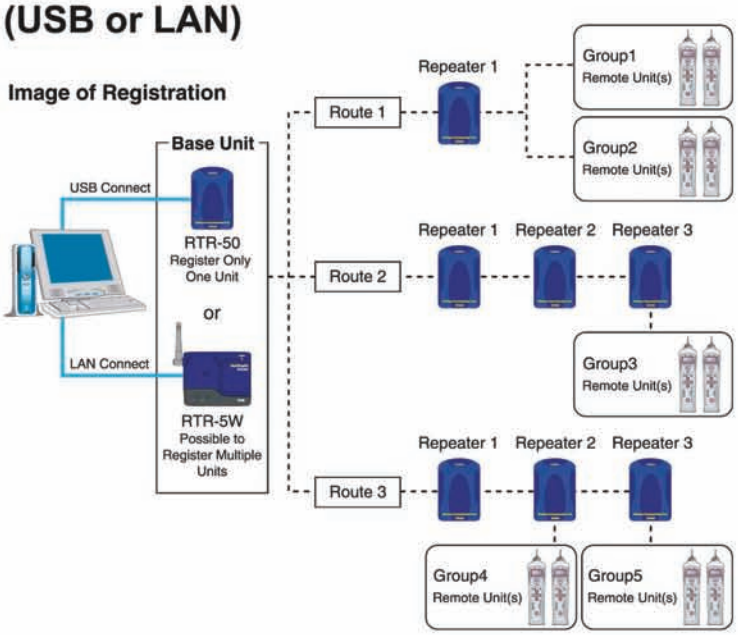
An RTR-50 unit is used as a Base Unit.
By directly connecting to your computer with a USB cable, the Base Unit (RTR-50) allows wireless access for the downloading of data from the RTR-61 Remote Unit.
By setting up RTR-50 unit(s) as Repeater(s), it is possible to extend the wireless communication range.

LAN RTR-61SK-W

For controlling the RTR-61 from a Base Unit connected to your computer via a network

An RTR-5W unit is used as a Base Unit.
By connecting to your computer via a network, the Base Unit (RTR-5W) allows wireless access for the downloading of data from the RTR-61 Remote Unit.
By setting up RTR-50 unit(s) as Repeater(s), it is possible to extend the wireless communication range.

Image of Registration



Software Included with Communication Set — RTR-61 for Windows (EU)

"RTR-61 for Windows (EU)® " is the name of the software included in the "Push Wireless Communication Set (RTR-61SK or RTR-61SK-W)". It has been designed to be used with our Wireless Core Temperature Data Logger, RTR-61. This user friendly software enables the user to download data, view data lists and save data to files, as well as make important logger settings.

Four Applications make up "RTR-61 for Windows (EU)".

- Network Settings Utility
If an RTR-5W unit is being used, this application enables the user to assign an IP Address / a Subnet Mask, receive settings and easily make all detailed Network Settings.

- RTR-61 Data Viewer
This application enables the viewing in list form of data downloaded from Remote Units. It is possible to output the recorded data into text file format.

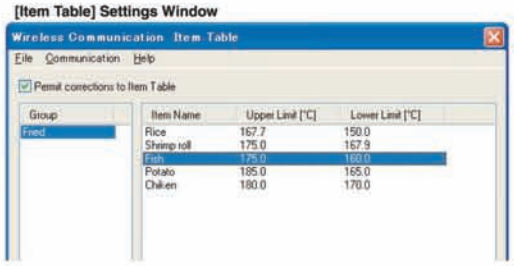
- RTR-61 for Windows
This application is a set of tools to create Item / User Tables, make Remote Unit Operational Settings and Download Recorded Data.

- RTR-61 Registration
This application is designed to carry out all registrations for Base Units, Repeaters and Remote Units. Remote Unit Registration is carried out via optical communication by placing a Data Logger face down on the Base Unit connected to the computer.

User Table / Item Table — from the RTR-61 for Windows

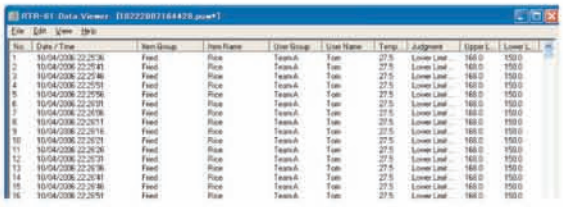
Create User and Item Tables, then register them into Remote Units. Up to 62 Items and 61 Users can be registered to one Remote Unit. Upper and Lower Limit Settings can also be made for an "Item Table".

[Item Table] Settings Window



Data List Display — from the RTR-61 Data Viewer

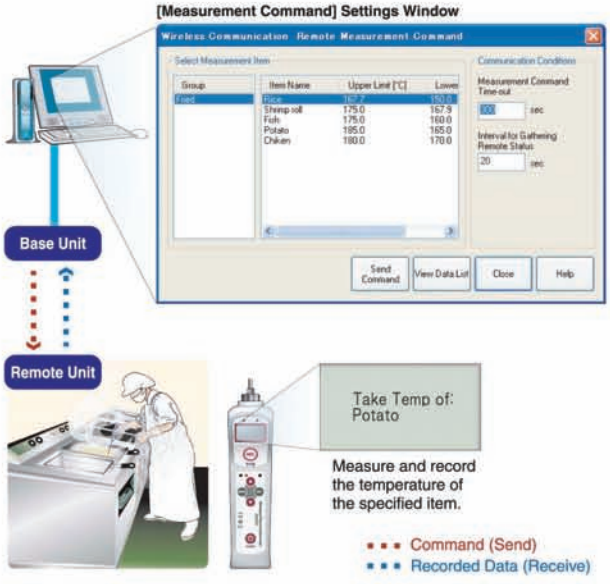
By using the "RTR-61 Data Viewer", it is possible to view the downloaded data as a list. The Info for the selected Remote Unit will be displayed at the right side of the window.



Remote Measurement Command — from the RTR-61 for Windows

This particular function enables a user to send a Measurement Command for a specified Item to a Remote Unit. When a User has carried out a measurement by receiving a Measurement Command from the Management Operator, the application "RTR-61 for Windows" will receive the measured temperature.

[Measurement Command] Settings Window



- To further help meet our customers need, we offer the RTR-61 Communication DLL. By using our RTR-61 DLL, you can create software on your own for your own situation and purposes. The following are the examples of the DLL functions: Control of Base Unit Functions via Computer, Remote Measurement Command, Downloading Data, Sending / Getting Tables. For details please contact your local T&D dealer.

■Product Specification

RTR-61			
Measurement Item		Temperature	
Measurement Channels		1 Channel	
Measurement Range		−25˚C to 235˚C	
Temperature Sensor		Thermistor	
Measurement Accuracy		Less than 10˚C ±1.5˚C	130˚C to 150˚C ±1.0˚C
		10˚C to 40˚C ±1.0˚C	150˚C to 180˚C ±1.5˚C
		40˚C to 85˚C ±0.8˚C	180˚C to 200˚C ±2.0˚C
		85˚C to 110˚C ±0.5˚C	More than 200˚C ±2.5˚C
		110˚C to 130˚C ±0.8˚C	
Measurement / Display Resolution		0.1˚C	
Measuring / Display Interval		0.5sec	
Number of Recorded Data		1800 data readings	
LCD Display		Date and Time, Measured Value, Battery Life Warning	
		Unit of Temperature (˚F / ˚C), User, Items	
Temp. Judgment LED Display		Out of Range: Red LED Blink Within Range: Green LED Blink	
Clock Resolution		Day / Month / Year / Hour / Minute / Second	
Clock Accuracy		Within +/− 1 second per day (at 25˚C)	
Battery		AAA Alkaline Batteries (LR03) x 2 (AAA Ni-Cd, Ni-MH Batteries also compatible)	
Battery Life		About 1 month (when used for PUSH recording every 10 minutes for 16 hours a day)	
Interface		Wireless Communication / Optical Communication	
Optical	Communication Speed	2400bps (when downloading 1 unit of full data: about 2 minutes and 30 seconds)	
Wireless	Wireless Method	ETSI EN 300-220, Frequency: 433MHz	
	Communication Speed	When downloading 1 unit of full data: about 6 minutes	
	Wireless Transmission Range	About 100m (if direct and unobstructed)	
Antenna		Internal Type	
Unit Water Resistance		IP64 (dust / splash resistant <rated for use in daily life>)	
Dimensions		146.8mm x 40mm x 37.9mm (excluding sensor part)	
Unit Weight		About 83g (Including 2 AAA batteries; excluding sensor)	
Operating Environment		−10˚C to 60˚C	

■Software Specifications

RTR-61 for Windows	
Compatible Devices (Base Unit) :	
RTR-50 (Wireless Communication Port) :	
Unit Version 2-1-x or above	
RTR-5W (Network and Wireless Station) :	
Internal Script Version 1.50 or above	
RF Version 1.4.x or above	
PC Operating Environment	
OS	Microsoft Windows® 98SE / ME English
	Microsoft Windows® 2000 / XP / Vista English
	* For installation, it is necessary to have Administrator (Computer Administrator) rights.
PC/CPU	A Stable Windows Operating Environment
Memory	Enough memory to stably operate Windows®
Hard Disk	More than 20 MB of free space (Data will need more space)
Monitor	SVGA (higher than 800 x 600 recommended) more than 256 colors
LAN	100BASE-TX or 10BASE-T Twisted pair cable conforming to Category 5 (STP/UTP)

■Temperature Sensor (Option)

Temperature Sensor	
Thermal Time Constant	In the air: About 12 sec. In agitated water: About 2 sec.
Sensor Materials	Stainless pipe (SUS316)
Handgrip Materials	Polysulfone Resin (Temperature Durability: About 170˚C)
Cord	Teflon® Resin(FEP) Shielded
Common Items Included	Sensor Spacer 1 / Rubber Packing 1 / Sensor Replacement Tool 1 / Sensor User's Manual 1

[Unit: mm]

All-in-one Type Temperature Sensor (Sensor directly attached to the RTR-61 Main Unit)

RTR-6110
Short Temperature Sensor (Sensor Length: 125mm)
RTR-6130
Long Temperature Sensor (Sensor Length: 300mm)

Separate Type Temperature Sensor
(Sensor with Handgrip and Cord. Easy to measure temperature, even in steam.)

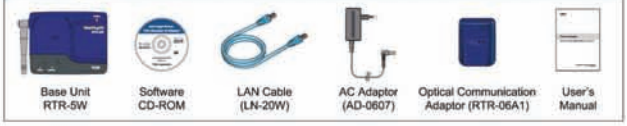
RTR-6210
Short Temperature Sensor (Sensor Length: 125mm / Cord Length: 900mm)
RTR-6230
Long Temperature Sensor (Sensor Length: 300mm / Cord Length: 900mm)

■Package of Contents

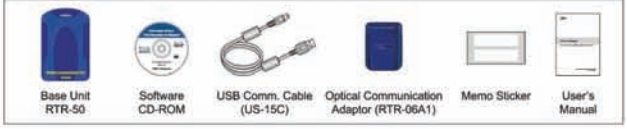
RTR-61

■Communication Set (Sold separately)

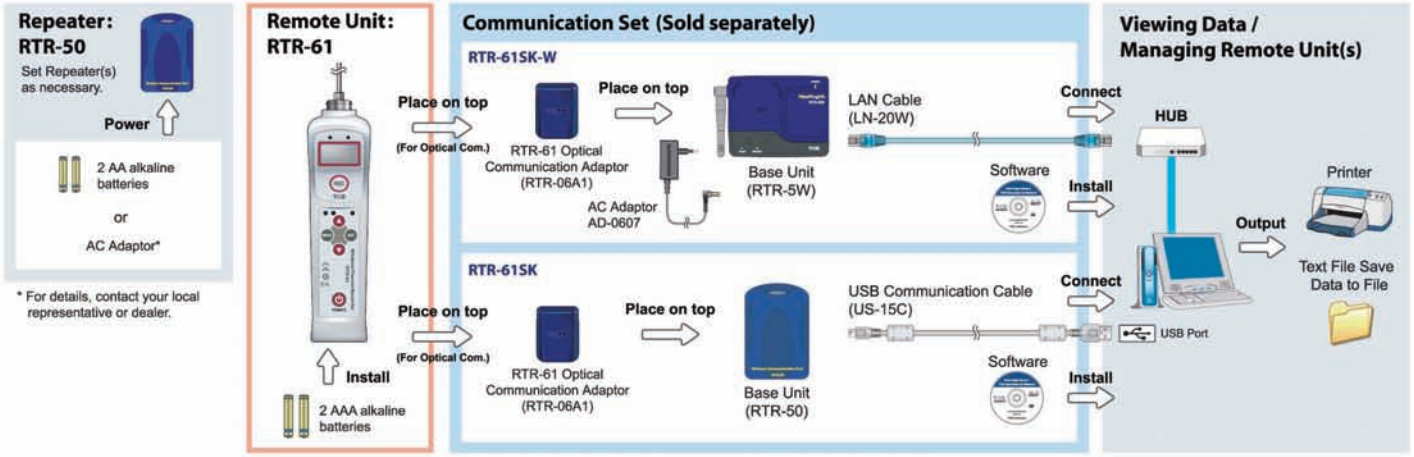
RTR-61SK-W



RTR-61SK



■System Setup



Complies with technical specifications required EN 301 489-3 (with battery and AC Adaptor), EN 300 220-3 and EN 60950:2000
Allowed for use in: A. B. D. DK. F. I. P. S. SW. UK. N. NL. CH. FIN. PL. CZ. SK. IE. LT. LV. ML. TUR.

Web Site Product information, FAQ and software update downloads.
http://www.tandd.com/

Caution regarding safety
To ensure safe operation, carefully read instructions before using this unit.

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