

T&D Optional Products Catalog



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Input Modules

TR-55i, RTR505B / 505BL

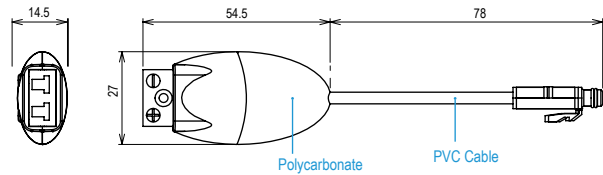
Discontinued: RTR-505

TCM-3010



Provided with TR-55i-TC

Thermocouple Module



[Unit: mm]

Compatible Sensors	Thermocouple: Type K, J, T, S
Measurement Range	within the sensor heat-durability range only
Measurement Resolution	Type K, J, T: 0.1 °C Type S: about 0.2 °C
Measurement Accuracy	Cold Junction Compensation *
	Thermocouple Measurement *
Operating Environment	Temperature -40 to 80 °C Humidity 90 %RH or less (no condensation)
Sensor Connection	Make sure to use a thermocouple sensor with a miniature thermocouple plug attached. T&D does not make available these plugs or sensors for sale.
Note	Can be extended by 3 meters with the Extension Cable TR-3C30

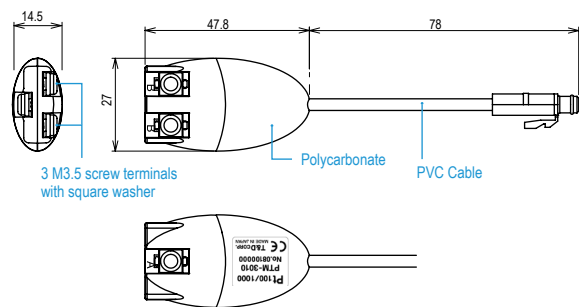
* Does not include inaccuracies of sensor actually connected.

PTM-3010



Provided with TR-55i-Pt

Pt Module



[Unit: mm]

Compatible Sensors	Pt100 (3-wire, 4-wire) Pt1000 (3-wire, 4-wire) In the case of a 4-wire sensor, one wire will be left unused.
Measurement Resolution	0.1 °C
Measurement Accuracy*	Ambient Temperature of Input Module -40 to 10 °C: ±0.5 °C + 0.3 % of reading 10 to 40 °C: ±0.3 °C + 0.3 % of reading 40 to 80 °C: ±0.5 °C + 0.3 % of reading
Operating Environment	Temperature -40 to 80 °C, Humidity 90 %RH or less (no condensation)
Included Items	Protection Cover
Notes	Can be extended by 3 meters with the Extension Cable TR-3C30

* Does not include inaccuracies of sensor actually connected.

Input Modules

TR-55i, RTR505B / 505BL

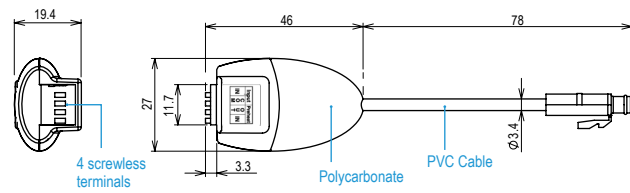
Discontinued: RTR-505

VIM-3010



Provided with TR-55i-V

Voltage Module



[Unit: mm]

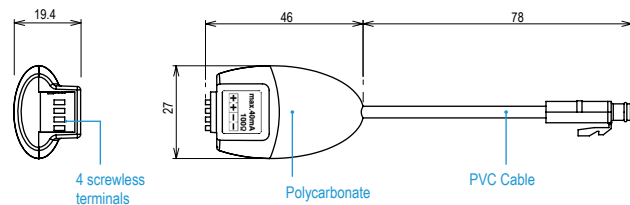
Measurement Item	Voltage 0 to 22 V
Measurement Resolution	Up to 400 mV : 0.1 mV Up to 800 mV : 0.2 mV Up to 999 mV : 0.4 mV Up to 3.2 V : 1 mV Up to 6.5 V : 2 mV Up to 9.999 V : 4 mV Up to 22 V : 10mV
Measurement Accuracy	Ambient Temperature of Input Module -40 to 10 °C : ±1 mV + 0.5 % of reading 10 to 40 °C : ±0.5 mV + 0.3 % of reading 40 to 80 °C : ±1 mV + 0.5 % of reading
Preheat Function	Voltage Range (Preheating): 3 V to 20 V (up to 100 mA) Time Range (Preheating): 1 to 999 seconds (in units of one-second) Capacitor Load: 330 µF or less
Operating Environment	Temperature: -40 to 80 °C, Humidity: 90 %RH or less (no condensation)
Note	Can be extended by 3 meters with the Extension Cable TR-3C30

AIM-3010



Provided with TR-55i-mA

4-20mA Module



[Unit: mm]

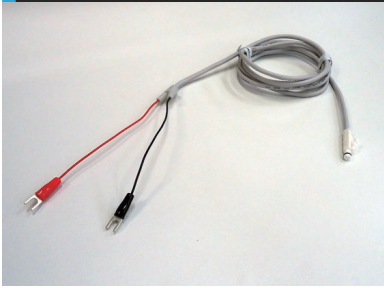
Input Resistance	0 to 20 mA Operational up to 40 mA
Measurement Resolution	0.01 mA
Measurement Accuracy	Ambient Temperature of Input Module -40 to 10°C : ±0.1 mA + 0.3 % of reading 10 to 40°C : ±0.05 mA + 0.3 % of reading 40 to 80°C : ±0.1 mA + 0.3 % of reading
Input Resistance	100Ω ±0.3Ω
Sensor Connection	Cable Insertion Connection: Plus(+) 2 Parallel Terminals, Minus(-) 2 Parallel Terminals: Total 4 Terminals
Compatible Wires	Single wire: φ 0.32 to φ 0.65 mm (AWG28 to AWG22), φ 0.65 mm (AWG22) recommended Twisted wire: 0.32 mm ² (AWG22), φ 0.12 mm or more in diameter Strip length: 9 to 10 mm
Operating Environment	Temperature -40 to 80 °C, Humidity 90 %RH or less (no condensation)
Note	Can be extended by 3 meters with the Extension Cable TR-3C30

Input Modules

TR-55i, RTR505B / 505BL

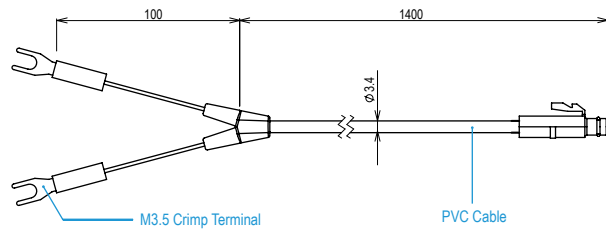
Discontinued: RTR-505

PIC-3150



Provided with TR-55i-P

Pulse Input Cable



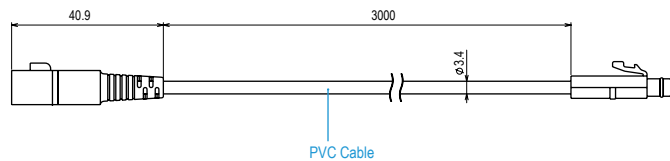
[Unit: mm]

Measurement Item	Pulse Count
Input Signal	Non-voltage Contact Input Voltage Input (0 to 27 V)
Detection Voltage	Lo: 0.5 V or less Hi: 2.5 V or more
Chattering Filter	ON: 15 Hz or less OFF: 3.5 kHz or less (when using square wave signals of 0-3 V or higher)
Response Polarity	Select either Lo → Hi or Hi → Lo
Maximum Count	61439 / Recording Interval
Input Impedance	Approx. 100 kΩ pull up
Note	When connecting the cable to the measurement object, in order to wire properly make sure to match the terminal polarities (RD+, BK -)

TR-3C30



Input Module Extension Cable

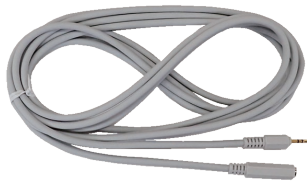


[Unit: mm]

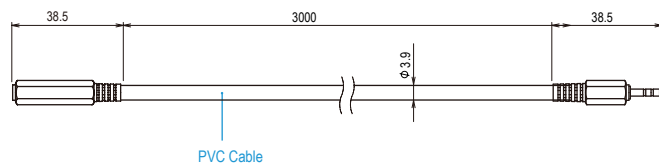
Temperature Durability	-25 to 60 °C
Waterproof Capacity	Splash proof (rated for use in daily life)
Compatible Sensors / Modules	Temp-Humidity Sensor: SHB-3101 (Discontinued: HHB-3101) Input Module: TCM-3010, PTM-3010, VIM-3010, AIM-3010, PIC-3150
Conditions for Use	Only one cable per sensor or module.

Sensor Extension Cables

TR-1C30



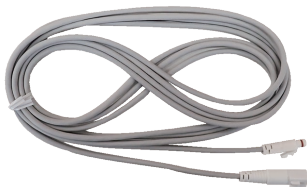
Sensor Extension Cable



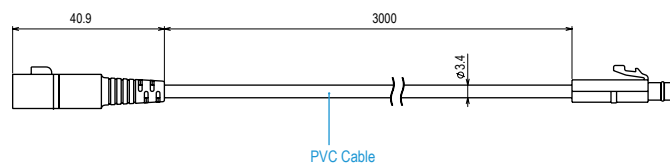
[Unit: mm]

Temperature Durability	-25 to 60 °C
Waterproof Capacity	None
Compatible Sensors	Temperature Sensor: TR-1106, TR-1220, TR-1320, TR-0106, TR-0206, TR-0306, TR-0406, TR-0506, TR-0706 Temp-Humidity Sensor: THA-3001, THA-3151, SHA-3151 (Discontinued: HHA-3151) Illuminance-UV Sensor: ISA-3151 Input Cable (Discontinued): VR-7101, VR-7102, VR-7103
Conditions for Use	Temperature sensors can use up to 3 meters of extension cables. Temp-Humidity sensors and Illuminance-UV sensors can use up to 9 meters of extension cables. Input cables can use multiple extension cables.

TR-2C30



Sensor Extension Cable



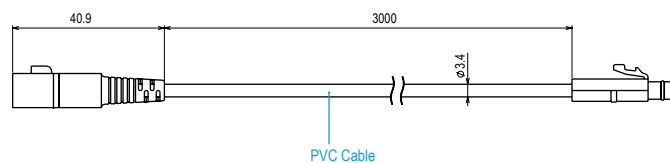
[Unit: mm]

Temperature Durability	-25 to 60 °C
Waterproof Capacity	Splash proof (rated for use in daily life)
Compatible Sensors	Temperature Sensor: TR-5101, TR-5106, TR-5220, TR-5320, TR-5420, TR-5530, TR-5620
Conditions for Use	Only one cable per sensor.

TR-3C30



Sensor / Input module Extension Cable



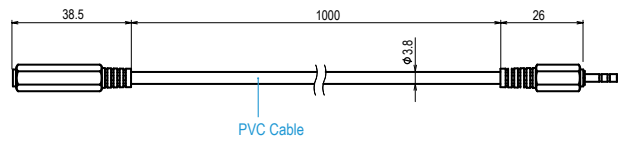
[Unit: mm]

Temperature Durability	-25 to 60 °C
Waterproof Capacity	Splash proof (rated for use in daily life)
Compatible Sensors / Modules	Temp-Humidity Sensor: SHB-3101 (Discontinued: HHB-3101) Input Module: TCM-3010, PTM-3010, VIM-3010, AIM-3010, PIC-3150, PMP-3200
Conditions for Use	Only one cable per sensor or module.

Sensor Extension Cables

TR-5C10

Sensor Extension Cable



[Unit: mm]

Temperature Durability	-25 to 60 °C
Waterproof Capacity	None
Compatible Sensors	Temperature Sensor: TR-1106, TR-1220, TR-1320, TR-0106, TR-0206, TR-0306, TR-0406, TR-0506, TR-0706, Temp-Humidity Sensor: THA-3001, THA-3151, SHA-3151, TR-3100* (Discontinued: HHA-3151) Illuminance-UV Sensor: ISA-3151
Conditions for Use	Temperature sensors can use up to 3 meters of extension cables. Temp-Humidity sensors and Illuminance-UV sensors can use up to 9 meters of extension cables. * Only 1 extension cable for TR-3100

AC Adaptors

AD-05A2

AC Adaptor (FCC)



USB Mini-B Type
 Input: AC 100-240 V
 Output: DC 5 V, 1 A
 Frequency: 50 / 60 Hz
 Cable Length: 1.5 m
 Plug Type: A
 Compatible Devices:
 Data Logger: TR71A / 72A (-S) / 75A, TR-71nw / 72nw (-S) / 75nw, MCR-4V / 4TC
 (Discontinued: TR-71wb / 72wb (-S) / 75wb, TR-71wf / 72wf (-S/-H) / 75wf, TR-72nw-H)

Note: When using with TR7 Series the logger body will become hot. Also note that the data logger itself will generate heat and the internal sensor will measure a temperature higher than actual; we recommend using an external temperature sensor.

AD-05C2

AC Adaptor (CE)



USB Mini-B Type
 Input: AC 100-240 V
 Output: DC 5V, 1 A
 Frequency: 50 / 60 Hz
 Cable Length: 1.5 m
 Plug Type: C
 Compatible Devices:
 Data Logger: TR71A / 72A (-S) / 75A, TR-71nw / 72nw (-S) / 75nw, MCR-4V / 4TC
 (Discontinued: TR-71wb / 72wb (-S) / 75wb, TR-71wf / 72wf (-S/-H) / 75wf, TR-72nw-H)

AD-06A1

AC Adaptor (FCC)



Provided with TR-76Ui (-S), RTR-576 (-S)

Input: AC 100-240 V
 Output: DC 6 V, 500 mA
 Frequency: 50 / 60 Hz
 Cable Length: 1.8 m
 Plug Type: A
 Compatible Devices:
 Base Unit: RTR500BC (Discontinued: RTR-500AW / 500NW, RTR-500, RTR-50, TR-57DCi, RTR-500DC, RTR-57C)
 Data Logger: TR-76Ui (-S), RTR-576 (-S)
 (Discontinued: TR-76Ui-H, RTR-576-H, TR-700W Series, RTR-7 Series)
 External Power Adaptor Kit: RTR-500A2
 (Discontinued: Kit RTR-05A1)

AD-06C1

AC Adaptor (CE)



Provided with TR-76Ui (-S) / RTR-576 (-S)

Input: AC 100-240 V
 Output: DC6 V, 1 A
 Frequency: 50 / 60 Hz
 Cable Length: 1.8 m
 Plug Type: C
 Compatible Devices:
 Base Unit: RTR500BC (Discontinued: RTR-500AW / 500NW, RTR-500, RTR-50, TR-57DCi, RTR-500DC, RTR-57U)
 Data Logger: TR-76Ui (-S), RTR-576 (-S)
 (Discontinued: TR-76Ui-H, RTR-576-H, TR-700W Series, RTR-7 Series)
 External Power Adaptor Kit: RTR-500A2
 (Discontinued: RTR-05A1)

AD-05A3

AC Adaptor (FCC)



Input: AC 100-240 V
 Output: DC5 V, 3 A
 Frequency: 50 / 60 Hz
 Cable Length: 1.2 m
 Plug Type: A
 Compatible Devices:
 Base Unit: RTR500BM (Discontinued: RTR-500MBS-A, RTR-500GSM, RTR-5W, WS-2)
 Battery Charger: RTR-600BD
 Discontinued data logger: TR-7W Series, WDR-3

AD-05C1

AC Adaptor (CE)



Provided with RTR500BW

Input: AC 100-240 V
 Output: DC 5 V, 2 A
 Frequency: 50 / 60 Hz
 Cable Length: 1.6 m
 Plug Type: C
 Compatible Devices:
 Base Unit: RTR500BW, RTR500BM
 (Discontinued: RTR-500MBS-A, RTR-500GSM, RTR-5W, WS-2)
 Discontinued data logger: TR-7W Series, WDR-3

AD-05A4

AC Adaptor (FCC)



Provided with RTR500BW

Input: AC 100-240 V
 Output: DC 5 V, 1 A
 Frequency: 50 / 60 Hz
 Cable Length: 1.8 m
 Compatible Devices: Base Unit RTR500BW

Battery Power Supply Accessories

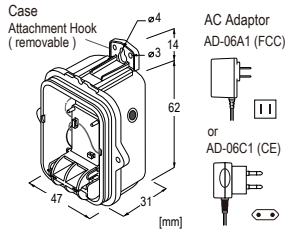
RTR-500A2

External Power Adaptor Kit



Internal Ni-MH battery provides about 4 days* of AC failure backup.
*Varies depending on the amount of charge in the Ni-MH battery.

Voltage Input: DC6V
Charging Method: Trickle Charge
Operational Temperature Range: 0 to 60 °C
Waterproof Capability: None
Weight: About 37 g (without AC Adaptor)
Included Items:
AC Adaptor (AD-06A1 or AD-06C1), Case and Attachment Hook, Rubber Packing, Lock Screw x 2, Rubber O-ring
Compatible Devices:
TR42A / 43A, RTR502B / 503B / 505B / 507B (Discontinued: TR42, RTR-502 / 503 / 505 / 507S / 507)



Note: RTR-500A2 should not be used with the RTR501B and TR41A as it will cause the RTR501B and TR41A to display a higher than actual temperature reading of up to 3 °C.

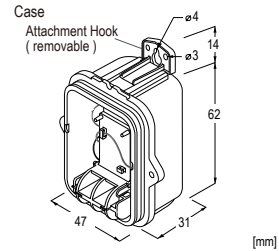
RTR-500B1

Large Capacity Battery Kit



About 4 years of battery life

Power: Lithium Battery x 1 (LS26500) *1
Battery Life: About 4 years *2
Waterproof Capability: Splash proof
Operational Temperature Range: -40 to 80 °C *3
Weight: About 75 g (including Lithium Battery)
Included Items:
Maintenance Set TR-00P1, Case and Attachment Hook
Compatible Devices:
TR41A / 42A / 43A, RTR501B / 502B / 503B / 505B / 507B (Discontinued: TR41 / 42, RTR-501 / 502 / 503 / 505 / 507S / 507)



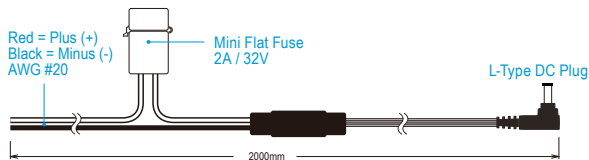
- *1: When using RTR-500B1 it is necessary to purchase Lithium Battery (LS26500). For details, contact your local authorized distributor.
- *2: Battery Life varies depending on measuring environment, recording interval, transmission frequency, and ambient temperature. The battery life estimated here is calculated using a new battery under normal operating conditions and in no way should be understood as a guarantee of battery life.
- *3: Operating temperature depends on the specifications for the data logger being used.

BC-0204

Battery Connection Adaptor



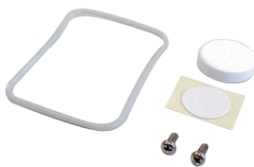
Power Source Conditions:
Voltage: input DC 9-38 V, output DC 5 V
Current: MAX 2 A
Compatible Devices:
Base Unit: RTR500BC, RTR500BM
Note: Prepare a battery that meets the above conditions.



Maintenance Set

TR-00P1

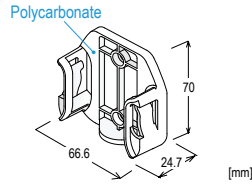
Maintenance Set



Compatible Devices:
TR41A / 42A / 43A, RTR501B / 502B / 503B / 505B / 507B, TR-51i / 52i / 55i
Discontinued:
TR41 / 42, RTR-501 / 502 / 503 / 505 / 507S / 507, RTR-5 Series, TR-5S / 5 Series
Included Items:
Rubber Packing, Silica Gel, Double-Sided Adhesive Tape, Lock Screw

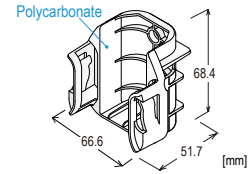
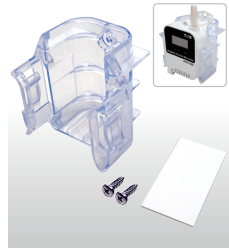
Wall Attachments

TR-05K3



Compatible Devices:
 TR41A / 42A / 43A, TR-51i / 52i / 55i,
 RTR501B / 502B / 503B / 505B / 507B
 (Discontinued: TR41 / 42, RTR-501 / 502 /
 503 / 505 / 507S / 507, RTR-51A / 52A / 53A,
 RTR-52Pt, RVR-52, TR-5S / 5 Series)
 Operational Temperature Range: -40 to 80 °C
 Included Items:
 Lock Screws for fastening to wall, Double-
 Sided Adhesive Tape

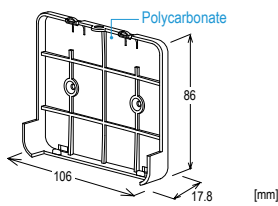
TR-05K3L



Compatible Devices:
 RTR501BL / 502BL / 503BL / 505BL / 507BL,
 TR41A / 42A / 43A*, TR45*
 (Discontinued: TR41 / 42*, RTR-501L / 502L /
 503L / 505L / 507SL / 507L, RTR-51AL /
 52AL / 53AL, RTR-52PtL, RVR-52L)
 Operational Temperature Range: -40 to 80 °C
 Included Items:
 Lock Screws for fastening to wall, Double-
 Sided Adhesive Tape
 * TR41A / 42A / 43A / 41 / 42: Can be used when
 attaching Large Capacity Battery Kit or External
 Power Adaptor Kit.

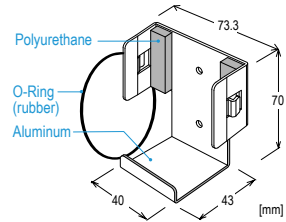
Note: Cracking may occur if polycarbonate is exposed to strong impact at temperatures of -30 °C or lower

TR-5WK1



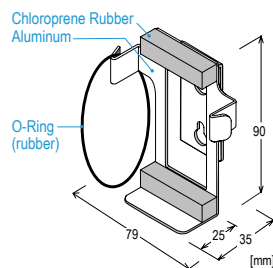
Compatible Devices:
 Data Collector: RTR500BW (Discontinued:
 RTR-500NW / 500AW, RTR-5W, WS-2)
 Discontinued data logger WDR-3
 Included Items:
 Lock Screws for fastening to wall, Lock
 Screw for fastening the device, Double-
 Sided Adhesive Tape

TR-5GK1



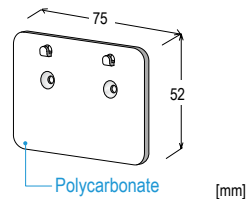
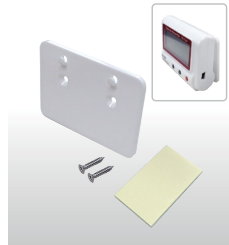
Compatible Device:
 RTR500BM (Discontinued: RTR-500MBS-A)
 Included Items:
 O-Ring, Lock Screws,
 Double-Sided Adhesive Tape

AT-50K1



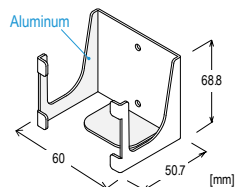
Compatible Device:
 RTR500BC (Discontinued: RTR-500)
 Included Items:
 O-Ring, Lock Screws,
 Double-Sided Adhesive Tape

TR-07K2



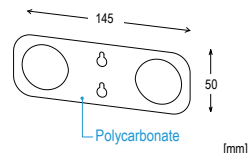
Compatible Devices:
 TR71A / 72A (-S) / 75A, TR-71nw / 72nw
 (-S) / 75nw, TR-74Ui (-S) / 73U, RTR-574 (-S)
 (Discontinued: TR-71wb / 72wb (-S) / 75wb
 / 71wf / 72wf (-S/-H) / 75wf, TR-72nw-H, TR-
 74Ui-H, RTR-574-H, TR-700W Series, TR-
 71Ui / 72Ui / 77Ui, TR-71U / 72U)
 Included Items:
 Lock Screws for fastening to wall,
 Double-Sided Adhesive Tape

AT-76K1



Compatible Devices:
 TR-76Ui (-S), RTR-576 (-S) (Discontinued:
 TR-76Ui-H, RTR-576-H)
 Included Items:
 Lock Screws for fastening to wall

AT-32K2



Compatible Device:
 TR32B (Discontinued: RTR-322)
 Included Items: Lock Screws for fastening to
 wall

Communication Cables

US-15C

USB Mini-B Cable

For Communication with PC
Cable Length: 1.5 m



TR-07C

Serial Communication Cable

For Communication with PC
Cable Length: 1.5 m
Connector: D-sub 9 pin



PC ⇔ Data Logger TR-74Ui (-S) / 76Ui (-S) / 73U (Discontinued: TR-74Ui-H / 76Ui-H)
Base Unit: RTR500BC (Discontinued: TR-57DCi, RTR-500DC, RTR-500)

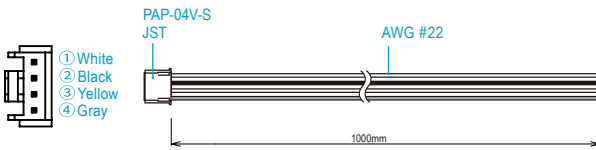
Note: Customers wishing to write their own software, please contact your local distributor for the serial communications protocol specifications.

Cable

AC0101

Alarm Connection Cable

Compatible Devices:
Base Unit: RTR500BM (Discontinued: RTR-500MBS-A)
Data Logger: RTR-576 (-S), TR-76Ui (-S)
(Discontinued: RTR-576-H, TR-76Ui-H)



Note: Please refer to "RTR500B series Help" or "TR-76Ui Operation Guide" before use. <https://tandd.com/manual/>

Antennas

CSR-0011

Antenna for RTR500B Series Base Units

Antenna Length: 135 mm
Connector: RP-SMA
Compatible Devices:
RTR500BW, RTR500BC, RTR500BM



CEL-0151

Extension LTE Antenna

Antenna Length: 88.5 mm
Cable Length: 1.5 m
Connector: RP-SMA
Compatible Devices: RTR500BM



Software for Purchase

SO-TD1

T&D Software



Software Included:
RTR500BW for Windows (US / EU)
RTR500BM for Windows (US / EU)
RTR500BC for Windows (US / EU)
RTR-600 Settings Utility (US)
TR7 for Windows
CO2 Recorder for Windows
Illuminance UV Recorder for Windows
MCR for Windows
T&D Recorder for Windows
T&D Data Server
T&D Graph

Note: Optional DVD-ROM that contains the Windows software for current T&D products. Software can be downloaded from T&D's Website, but for those who prefer, a DVD is available for purchase.