

# T&D Optional Products Catalog



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## Software for Purchase

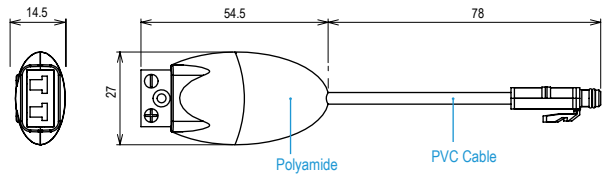
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**TCM-3010**



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

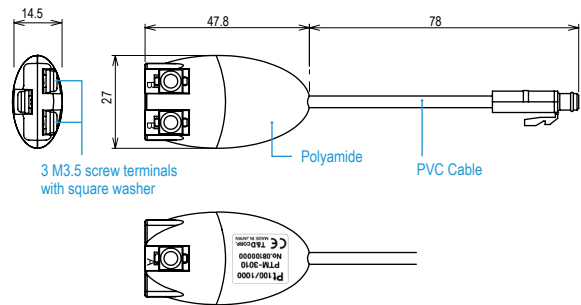
\* Does not include inaccuracies of sensor actually connected.

**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

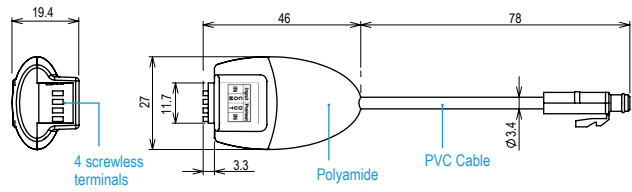
\* Does not include inaccuracies of sensor actually connected.

VIM-3010



Provided with TR-55i-V

Voltage Module



[Unit: mm]

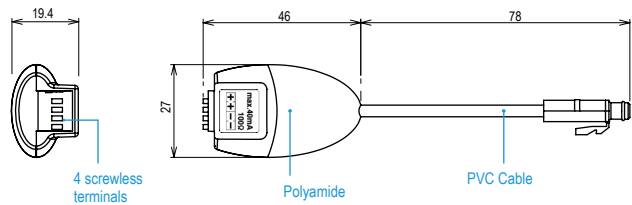
Measurement Item	Voltage 0 to 22 V
Measurement Resolution	Up to 400 mV : 0.1 mV
	Up to 800 mV : 0.2 mV
	Up to 999 mV : 0.4 mV
	Up to 3.2 V : 1 mV
	Up to 6.5 V : 2 mV
	Up to 9.999 V : 4 mV
Measurement Accuracy	Ambient Temperature of Input Module
	-40 to 10 °C : ±1 mV + 0.5 % of reading
	10 to 40 °C : ±0.5 mV + 0.3 % of reading
Preheat Function	40 to 80 °C : ±1 mV + 0.5 % of reading
	Voltage Range (Preheating): 3V to 20V100mA
	Time Range (Preheating): 1 to 999 seconds (in units of one-second)
Operating Environment	Capacitor Load: 330µF or less
	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

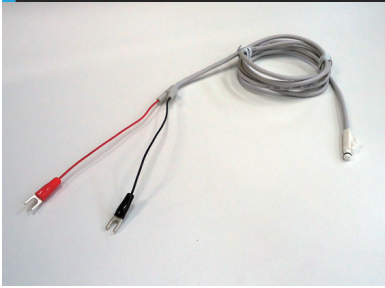
4-20mA Module



[Unit: mm]

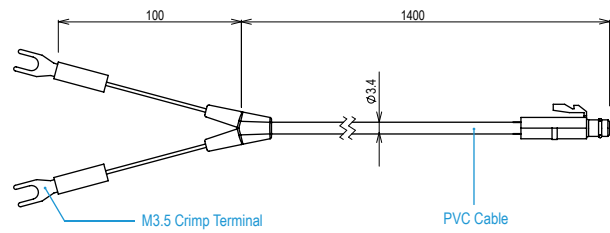
Input Resistance	0 to 20 mA Operational up to 40 mA
Measurement Resolution	0.01 mA
Measurement Accuracy	Ambient Temperature of Input Module
	-40 to 10 °C : ±0.1 mA + 0.3 % of reading
	10 to 40 °C : ±0.05 mA + 0.3 % of reading
Input Resistance	40 to 80 °C : ±0.1 mA + 0.3 % of reading
	100Ω ±0.3Ω
Sensor Connection	Cable Insertion Connection: Plus(+) 2 Parallel Terminals, Minus(-) 2 Parallel Terminals: Total 4 Terminals
Compatible Wires	Single wire:
	φ0.32 to φ0.65 mm (AWG28 to AWG22), φ0.65 mm (AWG22) recommended
	Twisted wire: 0.32 mm <sup>2</sup> (AWG22), φ0.12mm or more in diameter
Operating Environment	Strip length: 9 to 10 mm
	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

**PIC-3150**



Provided with TR-55i-P

**Pulse Input Cable**



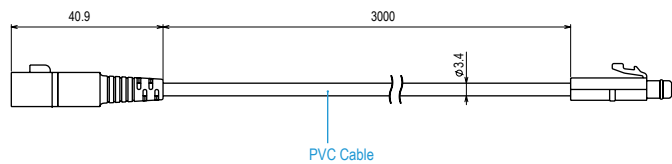
[Unit: mm]

Measurement Item	Pulse Count
Input Signal	Non-voltage Contact Input Voltage Input (0 to 27 V)
Detection Voltage	Lo: 0.5V or less Hi: 2.5V or more
Chattering Filter	ON: 15 Hz or less OFF: 3.5 kHz or less (when using square wave signals of 0-3V or higher)
Response Polarity	Select either Lo → Hi or Hi → Lo
Maximum Count	61439 / Recording Interval
Input Impedance	Approx. 100kΩ 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]

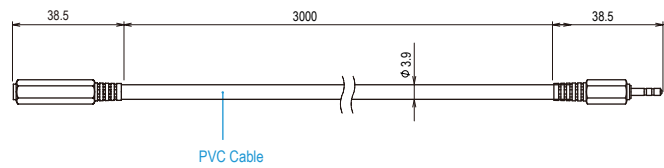
Temperature Durability	-25 to 60 °C
Waterproof Capacity	Splash proof (rated for use in daily life )
Compatible Sensors / Modules	Temp-Humidity Sensor: SHB-3101 (Previous Model HHB-3101) Input Module: TCM-3010, PTM-3010, VIM-3010, AIM-3010, PIC-3150
Conditions for Use	Only one cable per sensor or module.

## Sensor Extension Cables

### TR-1C30



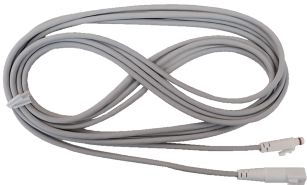
#### Sensor Extension Cable



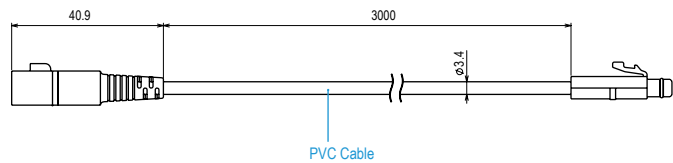
[Unit: mm]

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 (Previous Model HHA-3151) Illuminance-UV Sensor: ISA-3151 Input Cable: 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



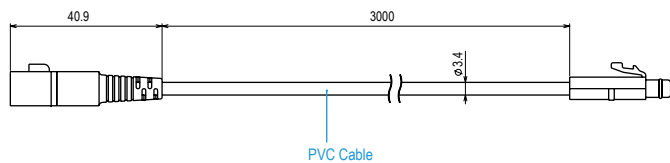
[Unit: mm]

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]

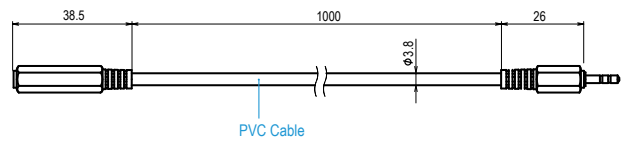
Temperature Durability	-25 to 60 °C
Waterproof Capacity	Splash proof (rated for use in daily life)
Compatible Sensors / Modules	Temp-Humidity Sensor: SHB-3101 (Previous Model HHB-3101) Input Module: TCM-3010, PTM-3010, VIM-3010, AIM-3010, PIC-3150, PMP-3200
Conditions for Use	Only one cable per sensor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

## Sensor Extension Cables

### TR-5C10



#### Sensor Extension Cable



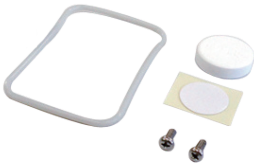
[Unit: mm]

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* (Previous Model 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

# Data Logger Maintenance Sets

## TR-00P1

### Maintenance Set



Compatible Devices:  
TR41A / 42A / 43A, RTR501B / 502B / 503B / 505B / 507B, TR-51i / 52i / 55i  
Discontinued-Compatible Devices:  
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

## RTR-500A2

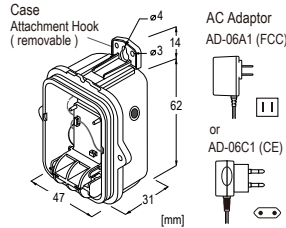
### External Power Adaptor Kit



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

Compatible Devices:  
TR42A / 43A, RTR502B / 503B / 505B / 507B  
Discontinued-Compatible Device:  
TR42, RTR-502 / 503 / 505 / 507S / 507  
Voltage Input: DC6V  
Charging Method: Trickle Charge  
Operating Temperature: 0 to 60 °C  
Waterproof Capacity: 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 x2, Rubber O-ring



**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

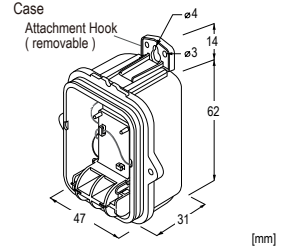
### Large Capacity Battery Kit



About 4 years of battery life

Compatible Devices:  
TR41A / 42A / 43A, RTR501B / 502B / 503B / 505B / 507B  
Discontinued-Compatible Devices:  
TR41 / 42, RTR-501 / 502 / 503 / 505 / 507S / 507  
Power: Lithium Battery x1 (LS26500) \*1  
Battery Life: About 4 years \*2  
Waterproof Capability: Splash proof  
Operating Temperature: -40 to 80 °C \*3  
Weight: About 75 g (including Lithium Battery)  
Included Items:

Maintenance Set TR-00P1, Case and Attachment Hook



- \*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.

## AC Adaptors / External Power Cables

### 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 / 72A-S / 75A, TR-71nw / 72nw / 72nw-S / 75nw, MCR-4V / 4TC
Discontinued-Compatible Devices	Data Logger: TR-71wb / 72wb / 72wb-S / 72wb-H / 75wb, TR-71wf / 72wf / 72wf-S / 72wf-H / 75wf, TR-72nw-H

### 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 / 72A-S / 75A, TR-71nw / 72nw / 72nw-S / 75nw, MCR-4V / 4TC
Discontinued-Compatible Devices	Data Logger: TR-71wb / 72wb / 72wb-S / 72wb-H / 75wb, TR-71wf / 72wf / 72wf-S / 72wf-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-06A1

#### AC Adaptor (FCC)



Provided with TR-76Ui / 76Ui-S, RTR-576/576-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, RTR-500DC, TR-57DCi Data Logger: TR-76Ui / 76Ui-S, RTR-576 / 576-S External Power Adaptor Kit: RTR-500A2
Discontinued-Compatible Devices	Base Unit: RTR-500AW/500NW, RTR-500, RTR-50, RTR-57C Data Logger: TR-76Ui-H, RTR-576-H, TR-700W Series, RTR-7 Series External Power Adaptor Kit: RTR-05A1

### AD-06C1

#### AC Adaptor (CE)



Provided with TR-76Ui / 76Ui-S, RTR-576/576-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, RTR-500DC, TR-57DCi Data Logger: TR-76Ui / 76Ui-S, RTR-576 / 576-S External Power Adaptor Kit: RTR-500A2
Discontinued-Compatible Devices	Base Unit: RTR-500AW/500NW, RTR-500, RTR-50, RTR-57U Data Logger: TR-76Ui-H, RTR-576-H, TR-700W Series, RTR-7 Series External Power Adaptor Kit: 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 Battery Charger:RTR-600BD
Discontinued-Compatible Devices	Base Unit: RTR-500MBS-A, RTR-500GSM, RTR-5W, WS-2 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-Compatible Devices	Base Unit: RTR-500MBS-A, RTR-500GSM, RTR-5W, WS-2 Data Logger: TR-7W Series, WDR-3

### AD-05A4

#### AC Adaptor (FCC)



Provided with RTR500BW

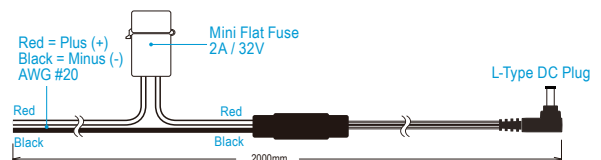
Input	AC 100-240 V
Output	DC 5 V, 1 A
Frequency	50 / 60 Hz
Cable Length	1.8 m
Compatible Devices	Base Unit: RTR500BW

### BC-0204

#### Battery Connection Adaptor



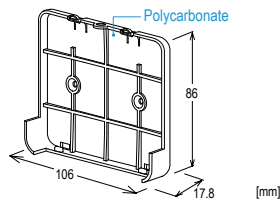
Power Source Conditions	Voltage: input DC 9-38 V output DC 5 V Current: MAX 2 A
Notes	Prepare a battery that meets the above conditions.
Compatible Devices	Base Unit: RTR500BC, RTR500BM





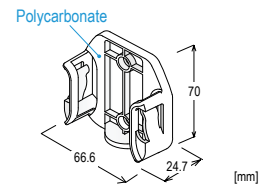
## Wall Attachments

### TR-5WK1



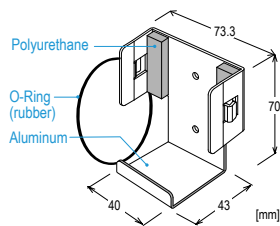
Compatible Devices: RTR500BW  
 Discontinued-Compatible Devices:  
 RTR-500NW / 500AW, WDR-3, WS-2, RTR-5W  
 Included Items:  
 Lock Screws for fastening to wall, Lock Screw for fastening the device, Double-Sided Adhesive Tape

### TR-05K3



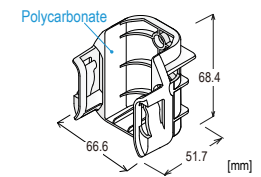
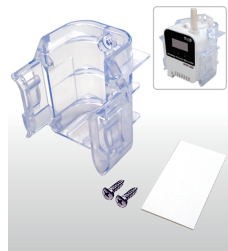
Compatible Devices:  
 TR41A / 42A / 43A, TR-51i / 52i / 55i,  
 RTR501B / 502B / 503B / 505B / 507B  
 Discontinued-Compatible Devices:  
 TR41 / 42, RTR-501 / 502 / 503 / 505 / 507S / 507, RTR-51A / 52A / 53A, RTR-52Pt, RVR-52, TR-5S/5 Series  
 Included Items:  
 Lock Screws for fastening to wall,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

### TR-5GK1



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

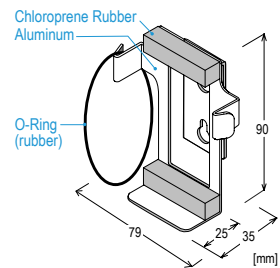
### TR-05K3L



Compatible Devices:  
 RTR501BL / 502BL / 503BL / 505BL / 507BL,  
 TR41A / 42A / 43A, TR45  
 Discontinued-Compatible Devices:  
 TR41 / 42, RTR-501L / 502L / 503L / 505L / 507SL / 507L, RTR-51AL / 52AL / 53AL, RTR-52PtL, RVR-52L  
 Included Items:  
 Lock Screws for fastening to wall, Double-Sided Adhesive Tape

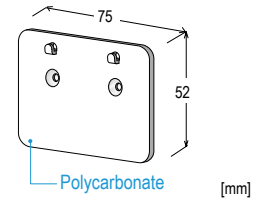
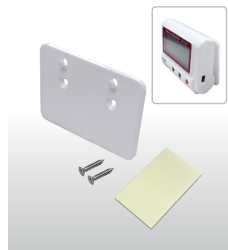
Note: TR41A / 42A / 43A / 41 / 42: Can be used when attaching Large Capacity Battery Kit or External Power Adaptor Kit.

### AT-50K1



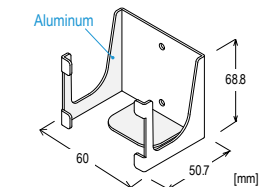
Compatible Device: RTR500BC  
 Discontinued-Compatible Devices: RTR-500  
 Included Items:  
 O-Ring, Lock Screws, Double-Sided Adhesive Tape

### TR-07K2



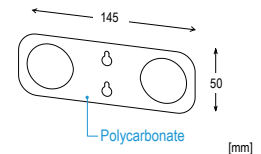
Compatible Devices:  
 TR71A / 72A / 72A-S / 75A, TR-71nw / 72nw / 72nw-S / 75nw, TR-74Ui / 73U, RTR-574 / 574-S  
 Discontinued-Compatible Devices:  
 TR-71wb / 72wb / 72wb-S / 75wb / 71wf / 72wf / 72wf-S / 75wf, TR-74Ui-H, RTR-574-H, TR-700W Series, TR-71Ui / 72Ui / 77Ui, TR-71U / 72U  
 Included Items: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

### AT-76K1



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

### AT-32K2



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

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

## Communication Cable

### US-15C

#### USB Mini-B Cable

For Communication with PC  
Cable Length: 1.5 m



### TR-6C10

#### Serial Communication Cable

For Communication between Data Collector  
and Data Logger  
Provided with TR-57DCi  
Cable Length: 1.0 m



RTR-500DC	⇔ RTR-574(S) / 576(S)
TR-57DCi	⇔ TR-74Ui(S) / 76Ui (S) / 73U, Discontinued: TR-71Ui / 72Ui, TR-71U / 72U
Discontinued: RTR-57U	⇔ Discontinued TR-71U / 72U
Discontinued: TR-57U	⇔ TR-74Ui(S) / 76Ui(S) / 73U Discontinued: TR-71Ui / 72Ui / 77Ui, TR-71U / 72U, TR-71S / 72S

### 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  
Data Collector TR-57DCi, RTR-500DC, RTR500BC,  
(Discontinued RTR-500)

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

### TR-4C10

#### Serial Communication Cable

For Communication between Data Collector  
and Data Logger  
Cable Length: 1.0 m



TR-57DCi	⇔ Discontinued: VR-71, TR-71S / 72S
Discontinued: RTR-57U	⇔ Discontinued: VR-71
Discontinued: TR-57U	⇔ Discontinued: VR-71
Discontinued: RTR-57C	⇔ Discontinued: VR-71, TR-71S / 72S
Discontinued: TR-57C	⇔ Discontinued: TR-71U / 72U

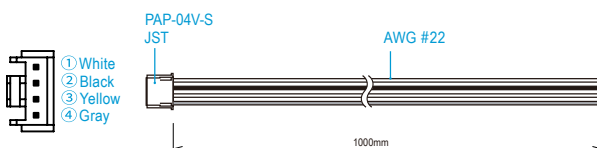
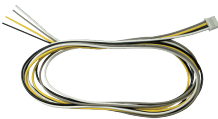
## Cable

### AC0101

#### Alarm Connection Cable

Compatible Devices:  
RTR500BM / RTR-576 (S) / TR-76Ui (S)  
Discontinued: RTR-500MBS-A / RTR-576-H /  
TR-76Ui-H

Conditions for Use:  
Please refer to "RTR500B series Help" or  
"TR-76Ui Operation Guide" before use.  
[tandd.com/manual/](http://tandd.com/manual/)



## Antenna

### CSR-0011

#### Antenna for RTR500B Series Base Unit



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-500DC 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.