## **T&D Optional Products Catalog**



## **Input Modules**

TCM-3010	p.2
PTM-3010	p.2
VIM-3010	p.3
AIM-3010	p.3
PIC-3150	p.3
TR-3C30	p.4



Data Logger Maintenance Sets

TR-00P1	p.5
RTR-500A2	p.5
RTR-500B1	p.5



Communication Cables

US-15C	p.6
TR-07C	p.6
TR-6C10	p.6
TR-4C10	p.6



Purchase

SO-15C1	р.б	
SO-B1	p.6	



Sensor Extention Cables

TR-1C30	p.7
TR-2C30	p.7
TR-3C30	p.7
TR-5C10	p.8



## AC Adaptors / External Power Cables

AD-05A2	 p.9
AD-05C2	 p.9
AD-06A1	 p.9
AD-06C1	 p.9
AD-05A3	 p.9
AD-05C1	 p.9
BC-0302	 p.9



## Wall Attachments

TR-5WK1	 p.10
TR-05K3	 p.10
TR-5GK1	 p.10
TR-05K3L	 p.10
AT-50K1	 p.10
TR-07K2	 p.10
AT-76K1	 p.10

## **T&D** Corporation

## **Input Modules**

#### TR-55i, RTR505B / 505BL

**Thermocouple Module** 

Discontinued > RTR-505

## TCM-3010



Provided with TR-55i-TC

<u>14.5</u>	54.5		78
G		vamide	PVC Cable

[Unit: mm ]

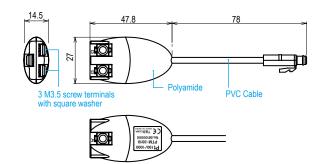
Compatible Sensors	Thermocouple: Type K, J, T, S
Measurement Range	within the sensor heat-durability range only
Measurement Resolution	Type K, J, T : 0.1°C Type S : about 0.2°C
Cold Junction Compensation *	-40 to 10°C: ±0.5°C 10 to 40°C: ±0.3°C 40 to 80°C: ±0.5°C
Thermocouple Measurement *	Type K, J, T : $\pm 0.3^{\circ}$ C+0.3% of reading Type S : $\pm 1$ °C+0.3% of reading
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.
Notes	Can be extended by 3 meters with the Extension Cable TR-3C30

 $^{\ast}$  Does not include inaccuracies of sensor actually connected.

**Pt Module** 



Provided with TR-55i-Pt



[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)
Accessories	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

Voltage Module

Discontinued > RTR-505

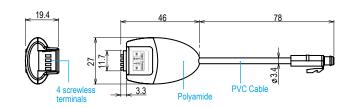
## VIM-3010



Provided with TR-55i-V

AIM-3010

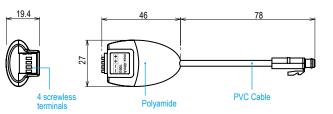
Provided with TR-55i-mA



[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 : 10 mV
Measurement Accuracy	Ambient Temperature of Input Module -40 to 10°C: ±1 mV + 0.5% of reading 10 to 40°C: ±0.5mV + 0.3% of reading 40 to 80°C: ±1mV + 0.5% of reading
Voltage Range (Preheating): 3V to 20V100mA   Preheat Function Time Range (Preheating): 1 to 999 seconds (in units of one-second capacitor Load: 330µF or less	
Operating Environment Temperature: -40 to 80°C , Humidity: 90%RH or less (no condensat	
Notes Can be extended by 3 meters with the Extension Cable TR-3C30	

#### 4-20mA Module



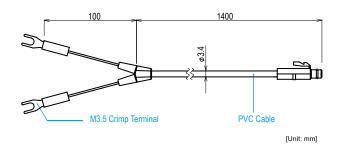
[Unit: mm]

Input Resistance	0 to 20mA Operational up to 40 mA	
Measurement Resolution	0.01mA	
Measurement Accuracy	Ambient Temperature of Input Module -40 to 10°C: ±0.1mA + 0.3% of reading 10 to 40°C: ±0.05mA + 0.3% of reading 40 to 80°C: ±0.1mA + 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: $\phi$ 0.32 to $\phi$ 0.65mm (AWG28 to AWG22), $\phi$ 0.65mm (AWG22) recommended Twisted wire: 0.32mm2 (AWG22), $\phi$ 0.12mm or more in diameter Strip length: 9 to 10mm	
Operating Environment	ent Temperature: -40 to 80°C , Humidity: 90%RH or less (no condensation)	
Notes	Can be extended by 3 meters with the Extension Cable TR-3C30	

# PIC-3150

Provided with TR-55i-P

## **Pulse Input Cable**



## **Input Modules**

#### TR-55i, RTR505B / 505BL

Input Module Extension Cable

Discontinued > RTR-505

# TR-3C30



	40.9	3000	
		PVC Cable	
			[Unit: mm]
Temperature Durability	–25 to 60°C		
Waterproof Capacity	Splash proof (	rated for use in daily life )	
Compatible Sensors / Modules	SHB-3101 (F Input Module:	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	Only one cable per sensor or module.	

#### **Data Logger Maintenance Sets**

## **TR-00P1**

#### **Maintenance Set**



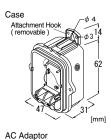
- Compatible Devices: RTR501B / 502B / 503B / 505B / 507B, TR-51i / 52i / 55i, TR41 / 42 Discontinued-Compatible Devices: RTR-501 / 502 / 503 / 505 / 507S / 507, RTR-5 Series, TR-51/51A/52, Included:
- Rubber Packing , Silica Gel, Double-Sided Adhesive Tape, Lock Screw

## **RTR-500A2**

Internal Ni-MH battery provides about 4 days\*2 of AC failure backup.



## **External Power Adaptor Kit**



AD-06A1 (FCC) or AD-06C1 (CE) E

 $\odot$ 

П Compatible Devices: RTR502B / 503B / 505B / 507B,

TR42 Discontinued-Compatible Device: RTR-502 / 503 / 505 / 507S / 507 Voltage Input: DC6V Charging Method: Trickle Charge Operating Temperature: 0 to 60°C Waterproof Capacity: None

Weight: About 37g (without AC Adaptor) Included:

AC Adaptor (AD-06A1 or AD-06C1) , Case and Attachment Hook, Rubber Packing , Lock Screwx2

\*1: RTR-500A2 should not be used with the RTR501B and TR41 as it will cause the RTR501B and TR41 to display a higher than actual temperature reading of up to 3°C.

\*2: Varies depending on the amount of charge in the Ni-MH battery.

## Case About 4 years of battery life Attachment Hool ( removable ) Compatible Devices: RTR501B / 502B / 503B / 505B / 507B, TR41 / 42 Discontinued-Compatible Devices: 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 75g (including Lithium Battery) Included: Maintenance Set TR-00P1, Case and Attachment Hook

**RTR-500B1** 

\*1: When using RTR-500B1 it is necessary to purchase Lithium Battery (LS26500). For details, contact your local authorized distributor.

**Large Capacity Battery Kit** 

62

31 [mm]

\*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.

#### **Communication Cables**

# **US-15C**



For Communication with PC

**USB Mini-B Cable** 

Cable Length: 1.5m



Cable Length: 1.0m

**Serial Communication Cable** 

For Communication between Data Collector and Data Logger RTR-500DC ⇔ RTR-574 / 576

KIK-300DC	$\leftrightarrow$	1111-314/310
TR-57DCi	⇔	TR-74Ui / 76Ui / 73U, TR-71Ui / 72Ui, TR-71U / 72U
RTR-57U	$\Leftrightarrow$	TR-71U / 72U
TR-57U	⇔	TR-71Ui / 72Ui / 74Ui / 76Ui / 73U / 77Ui, TR-71U / 72U, TR-71S / 72S

## **TR-07C**

Serial Communication Cable



Cable Length: 1.5 m Connector: D-sub9pin

For Communication between PC and Data Logger \* PC ⇔ TR-74Ui / 76Ui / 73U

For Communication between PC and Data Collector \* PC ⇔ TR-57DCi, RTR-500DC, RTR500BC, RTR-500

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



R-4C10

Cable Length: 1.0m

**Serial Communication Cable** 

For Communication between Data Collector and Data Logger TR-57DCi , RTR-57U ⇔ VR-71, TR-71S / 72S TR-57U ⇔ VR-71 RTR-57C  $\Leftrightarrow$  VR-71, TR-71S / 72S TR-57C ⇔ TR-71U / 72U

#### **Software for Purchase**



The TR-7wb/nw series software can be downloaded via the internet, but for those who prefer, a CD and USB cable set is available for purchase.

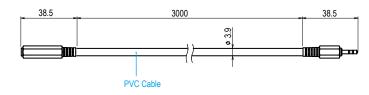
The RTR500B series software can be downloaded via the internet, but for those who prefer, a CD and USB cable set is available for purchase.

#### **Sensor Extension Cables**

## **TR-1C30**



## Sensor Extension Cable



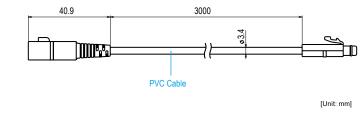
[Unit: mm]

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

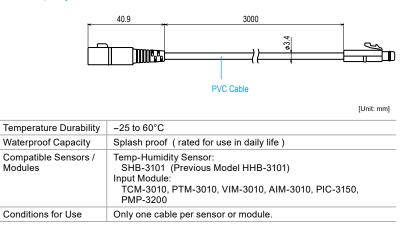


Temperature Durability	-25 to 60°C
Waterproof Capacity	Splash proof (rated for use in daily life)
Compatible Sensors	Temperature Sensor: TR-5101, TR-5106, TR-5220, TR-5320, TR-5420, TR-5530, TR-5620
Conditions for Use	Only one cable per sensor.

## **TR-3C30**



## Sensor / Input module Extension Cable

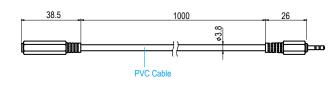


## **Sensor Extension Cables**

# 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

#### **AC Adaptors / External Power Cables**



\* When using with TR-7wb/nw 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

Provided with TR-76Ui / 76Ui-S, RTR-576/576-S

AC Adaptor (	FCC)	A
Input	AC 100 to 240 V	
Output	DC 6 V, 500 mA	
Frequency	50 / 60 Hz	
Cable Length	1.8 m	
Plug Type	A	1
Compatible Devices	Base Unit : RTR500BC, RTR-500DC, TR-57DCi Data Logger: TR-76Ui, RTR-576 (Including S Type) External Power Adaptor Kit: RTR-500A2	Provide 76Ui-S,
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	

#### -06C1 AC Adaptor (CE)

Input



led with TR-76Ui / , RTR-576/576-S

Output	DC 6 V, 1 A
Frequency	50 / 60 Hz
Cable Length	1.8 m
Plug Type	С
Compatible Devices	Base Unit: RTR500BC, RTR-500DC, TR-57DCi Data Logger: TR-76Ui, RTR-576 (Including S Type) External Power Adaptor Kit:
Discontinued- Compatible Devices	RTR-500A2 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

AC 100 to 240 V

## AD-05A3



### AC Adaptor (FCC)

AC Adaptor (FCC)

Input	AC100-240V
Output	DC5V 3A
Frequency	50 / 60 Hz
Cable Length	1.2 m
Plug Type	A
Compatible Devices	Base Unit: RTR500BM, RTR-500MBS-A Battery Charger: RTR-600BD
Discontinued- Compatible Devices	Base Unit: RTR-500GSM, RTR-5W, WS-2 Data Logger: TR-7W Series, WDR-3

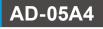
## AD-05C1



Discontinued-Compatible Provided with RTR500BW

## AC Adaptor (CE)

#### AC100-240V Input Output DC5V 2A Frequency 50 / 60 Hz Cable Length 1.6m Plug Type С Compatible Base Unit: RTR500BW, RTR500BM, Devices RTR-500MBS-A Base Unit: RTR-500GSM, RTR-5W, Devices WS-2 Data Logger: TR-7W Šeries, WDR-3





Input	AC100-240V
Output	DC5V 1A
Frequency	50 / 60 Hz
Cable Length	1.8m
Compatible Devices	Base Unit: RTR500BW

Provided with RTR500BW

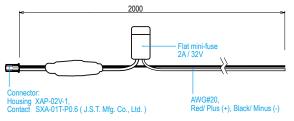
#### BC-0302



## **External Power Cable**

Power Source	Voltage DC 10 to 24 V
Conditions	Current MAX 2A
Notes	Prepare a battery that meets the above conditions.
Compatible Devices	Base Unit: RTR-500MBS-A

#### Provided with RTR-500MBS-A

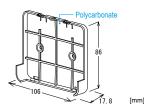


[Unit: mm]

#### **Wall Attachments**

## TR-5WK1





Compatible Devices:

RTR500BW Discontinued-Compatible Devices: RTR-500NW / 500AW, WDR-3, WS-2, RTR-5W

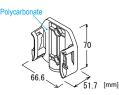
Included: Lock Screws for fastening to wall, Lock Screw for fastening the device, Double-Sided Adhesive Tape



TR-05K3L

TR-07K2

1



Compatible Devices: TR-51i/52i/55i RTR501B/502B/503B/505B/507B,

- TR41/42
- Discontinued-Compatible Devices: RTR-501/502/503/505/507S/507, RTR-51A/52A/53A, RTR-52Pt, RVR-52, TR-51S/52S,

TR-51/51A/52 Included:

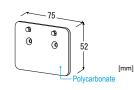
Lock Screws for fastening to wall Double-Sided Adhesive Tape



Compatible Devices: RTR501BL / 502BL / 503BL / 505BL / 507BL, TR45, TR41/42\* Discontinued-Compatible Devices: RTR-501L / 502L / 503L / 505L / 507SL / 507L, RTR-51AL / 52AL / 53AL, RTR-52PtL, RVR-52L

Included:

Lock Screws for fastening to wall Double-Sided Adhesive Tape TR41/42: Can be used when attaching Large Capacity Battery Kit or External Power Adaptor Kit.



Compatible Devices: TR-71hw / 72wb / 72wb-S / 75wb, TR-71hw / 72nw / 72nw-S / 75nw, TR-74Ui / 73U, RTR-574 / 574-S Discontinued-Compatible Devices:

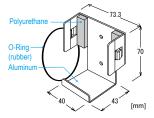
- TR-71wf / 72wf / 72wf-S / 75wf,
- TR-74Ui-H, RTR-574-H

TR-700W Series, TR-71Ui / 72Ui / 77Ui, TR-71U / 72U

Included:

Lock Screws for fastening to wall Double-Sided Adhesive Tape

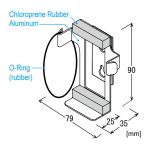




Compatible Device: RTR500BM, RTR-500MBS-A Included: O-Ring, Lock Screws,

Double-Sided Adhesive Tape

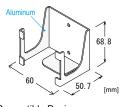




Compatible Device: RTR500BC Discontinued-Compatible Devices: RTR-500 Included: O-Ring, Lock Screws, Double-Sided Adhesive Tape

## AT-76K1





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

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