# **Pro S** Track Busway





SMART ENERGY FOR THE FUTURE

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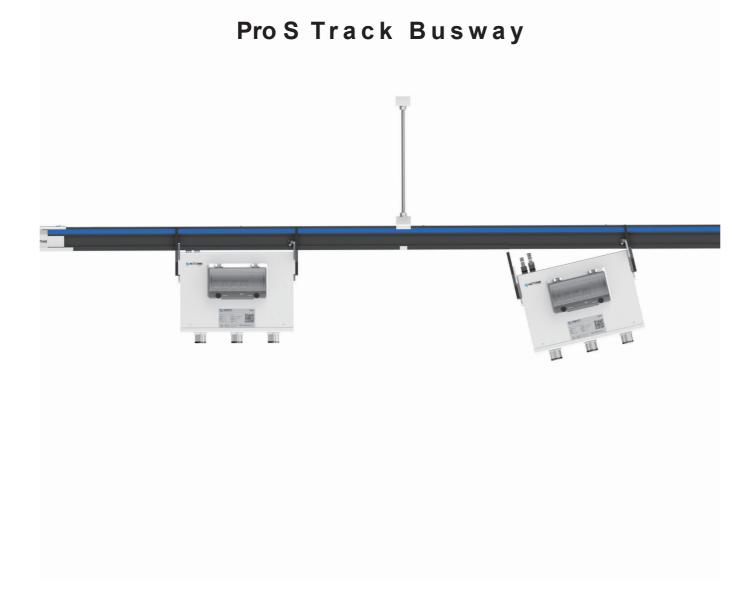
Add: No.1, Nanzi Road, Technology Park, Xinba Town, Yangzhong City, Jiangsu, China

#### Pro S 202304

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Smart Energy for the Future

# **CONTENTS**

bany Profile	01
em Overview	02
uct Features	03
nical Parameter	80
tional Unit	11
gent Monitoring Module	25
uct Code	29

# **METOMN**



# Company Profile

Wetown Electric (SH. 688226) mainly covers two business segments: power distribution and new energy, and is committed to providing highquality solutions and services for customers in power, new energy, data communication, rail transit, industrial manufacturing and other industries

Core value: Customer Orientation, Innovation and Foresight, Accountability Capability & advantage

Dedicated in electric product development and manufacturing for over 30 years, with the key business: busway, switchboard, electrical components, PV ribbon, copper/aluminum conductors;

 Large scale of intelligent manufacturing system and complete industrial chains in busway industry;

- Comprehensive international certifications including KEMA, ASTA, UL, CE;
- "Well-known Trademark in China" and "the Most influential national brand in electrical industry".

#### Global coverage

Wetown has wide global coverage with thousands of installation basis in over forty countries including South-east Asia, India, Middle East, Africa, Russia, Europe, Latin America, Australia etc.

ISO 9001	ISO 14001	OHSA 18001
SA 8000	GB/T 27922	GB/T 29490
UL	KEMA	ASTA
EAC	CIDET	RoHS
Cac	CE	•

## System Overview

The Pro S track busway can meet the power demand of 160-1000A, and the current of the tapoff unit circuit breaker frame is from 16A-125A,The product structure adopts a 3P5W system, and the output include single circuit, 3-circuit, 6-circuit and other specifications.

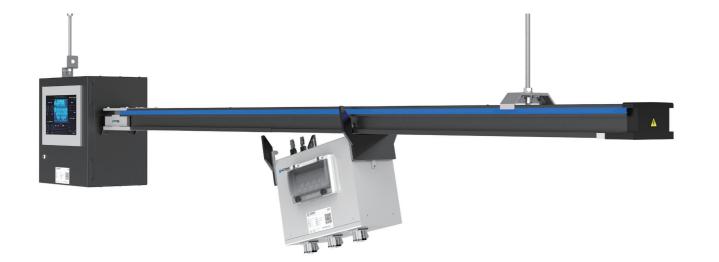
The whole series of products are compatible with the tap-off unit, and the originality realizes the structural of the slide rail type tap-off unit. The installation of the tap-off unit is automatically locked, and the entire length of the busway can be plugged in to take power. The elastic joint completely eliminates the risk of the traditional joint fastening bolt loosening. Pro S series products are suitable for a variety of indoor scenarios, such as data centers, light industrial plants, medical buildings and other occasions, with the advantages of low temperature rise, good heat dissipation, high power distribution efficiency, flexible branching, stable and reliable.







Product Features





## Track busway

- Busway 160A-1000A
- Tap-off unit 16A-100A
- Insertion at any position of linear segment
- Full range of ultra-low temperature rise
- Elastic fixation of joint
- Telemetry, remote signaling, remote regulation and remote control



#### Elastic contact joint (patent)

- Integral installation
- No risk of loosening
- Automatic contact pressure balancing
- Installation error redundancy

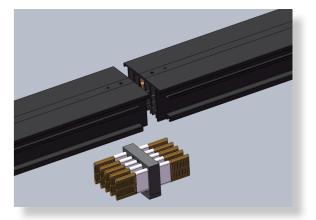
# Product Features

## Plug in power at any position

- Fully pluggable
- Millimeter adjustment
- Take power freely

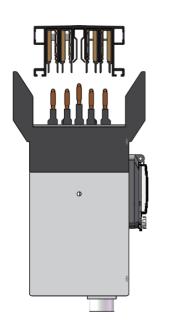
## Original slide rail tap-off unit

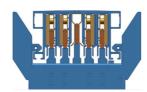
- Easy hanging and arbitrary sliding
- Automatic locking without tools
- Single person operation, fast completion





# Product Features





## Safe and reliable joint

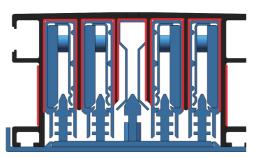
- Double side contact self limiting
- Automatic locking in place (patent)
- PE pin comes out first

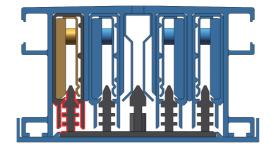
# Excellent thermal conductivity and heat dissipation

- Heat dissipation area increased to 150%
- Heat dissipation effect increased by 30%

#### Safe structural design

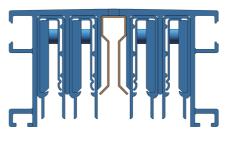
- No risk of interphase short circuit
- The maximum creepage distance is 60mm





#### Expandable grounding system

- Independent PE expandable (up to 100%)
- Installation position can be customized



#### Modular product structure design

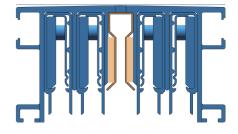
- Common to busway standard parts
- Universal for all series of tap-off units
- Flexible application scenarios

#### Flexible adjustment and customization

- Plug in assembly
- Standard groove sealing strip
- Snap closure plate



# Product Features





# **WETOWN**

Product Features

## Intelligent solutions

- GB/T 7251.8-2020
- Telemetry, remote signaling, remote regulation and remote control
- Cloud background and APP real-time operation

#### Overview



Real-Time Measurement And Control

## General parameters

Conductor	T2 electrolytic copper	
Enclosure	Aluminum magnesium silicon alloy	
Conductor surface finish	Full-length silver plating	Can be changed according to user requirement
Enclosure finish	Epoxy resin powder electrostatic spraying	Can be changed according to user requirement
Structural properties		
Busway	IP42	
Tap-off unit	IP42	
Wire system	3L+N+PE	
Tap-off unit output	Single circuit Three-circuit Six-circuit	Configure according to user requirements
Normal use conditions		
Place of use	Household	
Ambient temperature low	-5 ℃	
Ambient temperature high	+ 50 °C	
Ambient air temperature - maximum daily mean temperature	+ 35 ℃	
Maximum relative humidity	Relative humidity nmt 50% at 40°C	
Environmental pollution level	Grade 2	
Installation site altitude	≤ 2000m	
Installation mode	Horizontal mounted, can be hoisted or moun	ted in cable slots under floor
Product certification		
250Aac-1000Aac/315Adc-1600Adc ful	I range of bus KEMA-KEUR and CE certification	on
16-100A full range of tap-off units DEK	RA and CE certification	
250Aac-1000Aac busbar and 16-100A	tap-off unit CCC Type II voluntary certification	
315Adc-1600Adc busbar CQC low-vol	age DC complete switchgear safety certification	on
GB/T 7251.8 Intelligent Complete Equi	pment Certification	
YD 5083 Class 9 seismic certification		
IEC 60068-3-3 zone4 seismic certifica	ion	

# Technical Parameter



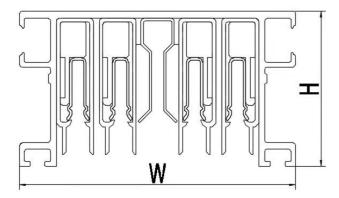
Technical Parameter

## Busway parameters

Alternating current (AC) current class A		250	400*	400**	500	630	800	1000
Direct current (DC) current class A		400	630		800	1000	1200	1600
Bus section height H/mm			7	0			78	95
Bus section width W/mm				12	20			
Rated short-time withstand current kA (CCC)		10		30			40	50
Rated peak withstand current kA(CCC)		17			63		80	105
Rated short-time withstand current kA (KEMA-KEUR)		10		-	20	30	40	50
Rated peak withstand current kA (KEMA-KEUR)		17		-	40	63	80	105
Rated working voltage (without tap-off unit) V	1000							
Rated working voltage (with tap-off unit) V				4(	00			
Rated insulation voltage (without tap-off unit) V	1000							
Rated insulation voltage (with tap-off unit) V				50	00			
Rated impulse withstand voltage (without tap-off unit) kV	V 8							
Rated impulse withstand voltage (with tap-off unit) kV	6(63A and below)/4(63-125A)							
Resistance R20 (mΩ/m)	-	0.3591	0.2298	0.1436	0.1149	0.0912	0.0718	0.0575
Reactance X (mΩ/m)	-	0.267	0.1709	0.1068	0.0854	0.0678	0.0534	0.0427
Impedance Z20 (mΩ/m)	-	0.4475	0.2864	0.179	0.1432	0.1136	0.0895	0.0716

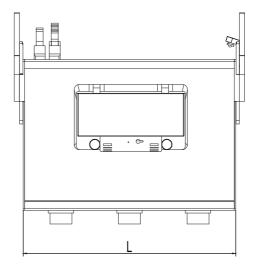
400\* is an economic type with low short-term resistance; 400\*\* is a high-short-time performance type; 400\*\* only has CCC certification, and other AC and DC specifications have KEMA-KEUR, CE and CCC/CQC certification

X of 630A busbar is measured value, R20 and Z20 are calculated values, and R20, X and Z20 of other current levels are theoretically calculated values



# Tap-off unit parameters

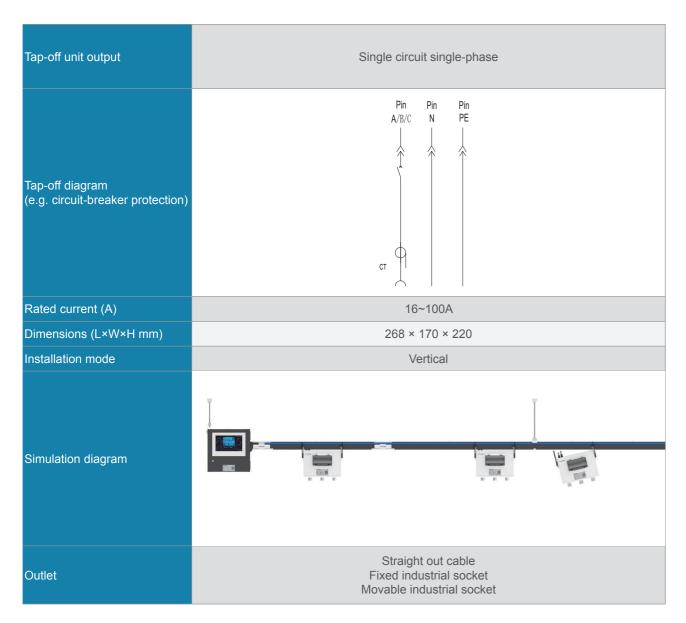
Frame current of tap-off unit circuit breaker A	16~63A	80~125A	
Tap-off unit height (H/mm)	220		
Connector box thickness (W/mm)	128		
Tap-off unit length (3-way output tap-off unit) (L/mm)	336*	550*	
Intelligent module (U, I, GB/T 7251.8-2020)	51.8-2020) Optional		
Intelligent module (U, I, T, GB/T 7251.8-2020)	Optional		
Tap-off unit output channel Standard 3-way, optional single-way, 6-way			
Tap-off unit output form   Standard fixed socket, optional active socket or cable terminal			
Tap-off unit installation form Vertical/Horizontal			
*The length and dimension of the tap-off unit may vary according to the configuration			

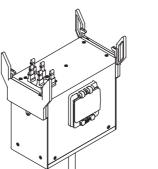


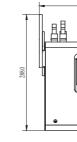
# Technical Parameter



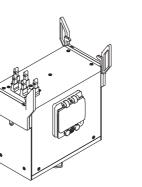
#### Outline dimension drawing of tap-off unit

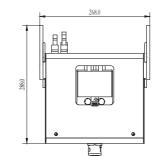




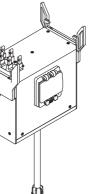


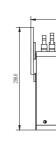
Straight out cable





Fixed industrial socket

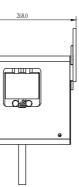






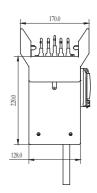
Movable industrial socket

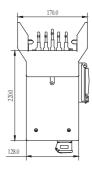
Note:The standard configuration is three-circuit single-phase, which can be customized according to user requirements.

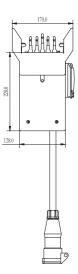








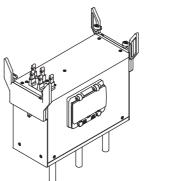






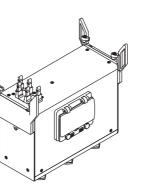
#### Outline dimension drawing of tap-off unit

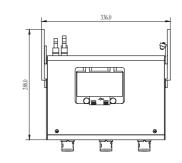
Tap-off unit output	Three-circuit single-phase
Tap-off diagram (e.g. circuit-breaker protection)	Pin Pin Pin Pin Pin Pin A B C N PE $A$ $A$ $B$ $A$
Rated current (A)	16~100A
Dimensions (L×W×H mm)	336 × 170 × 220
Installation mode	Vertical
Simulation diagram	
Outlet	Straight out cable Fixed industrial socket Movable industrial socket



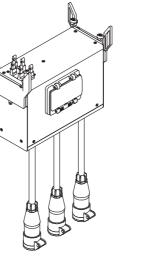




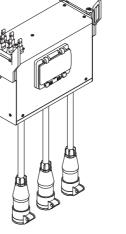




Fixed industrial socket

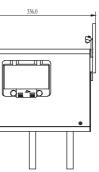




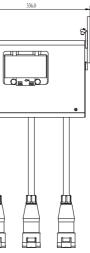




# Function Unit

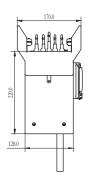


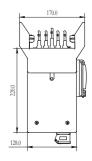


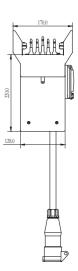


Movable industrial socket

Note: The standard configuration is three-circuit single-phase, which can be customized according to user requirements.

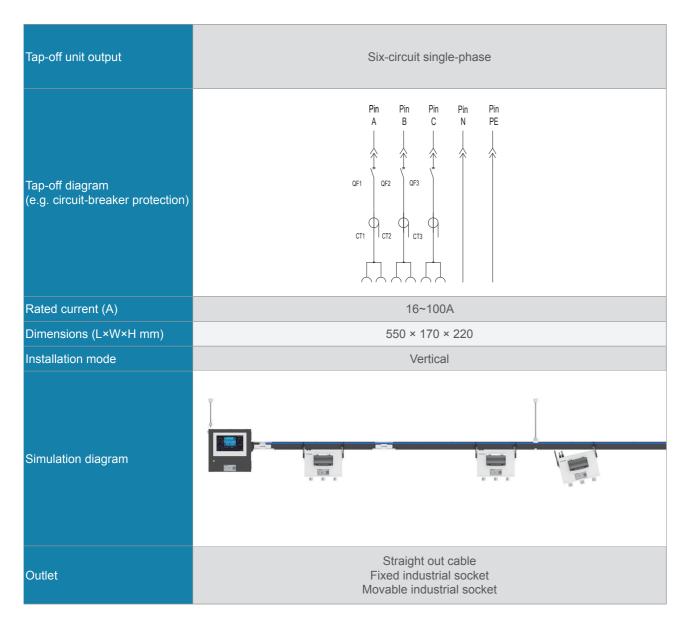


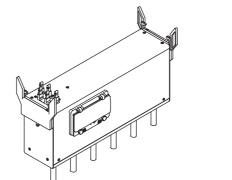


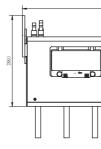




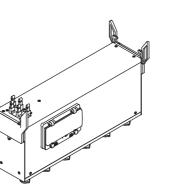
#### Outline dimension drawing of tap-off unit

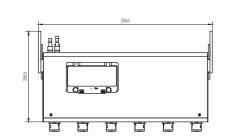




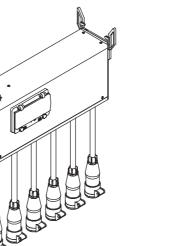


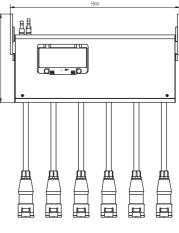
Straight out cable





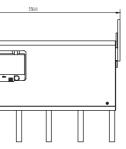
Fixed industrial socket

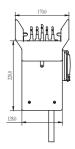


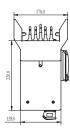


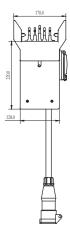
Movable industrial socket

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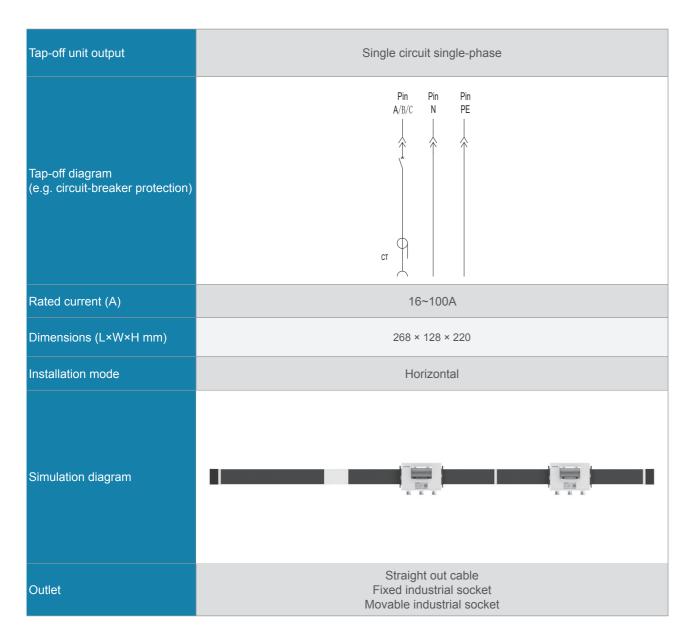


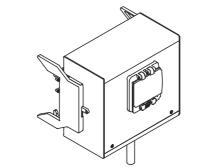


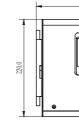




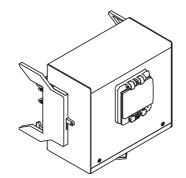
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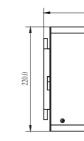




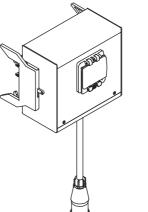


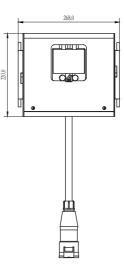
Straight out cable

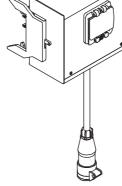




Fixed industrial socket

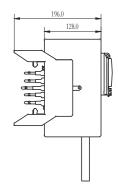




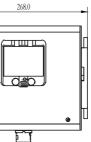


Movable industrial socket

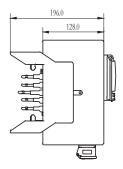
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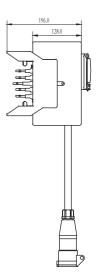






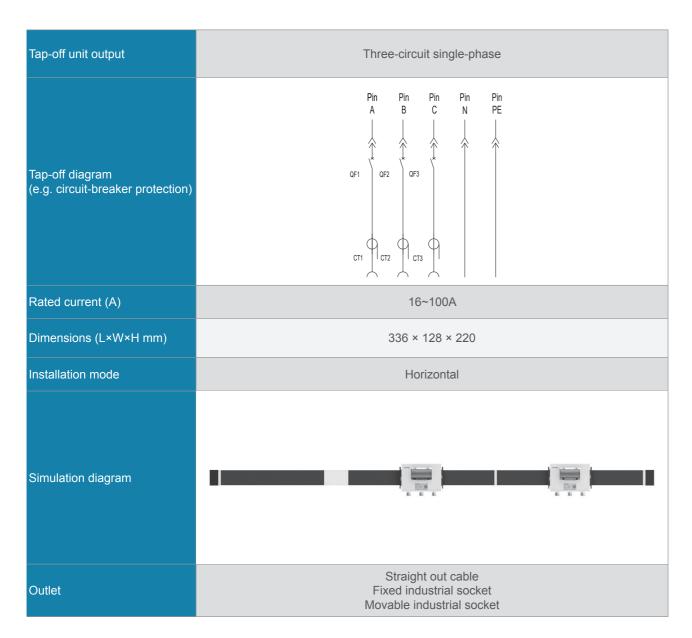


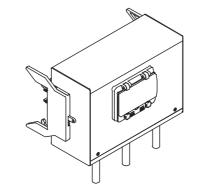






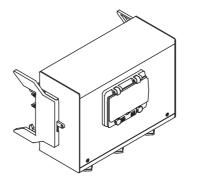
#### Outline dimension drawing of tap-off unit





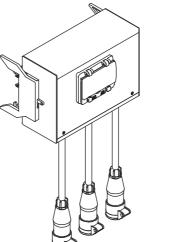


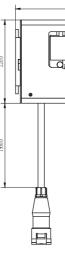
Straight out cable



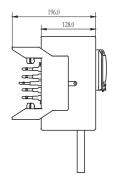


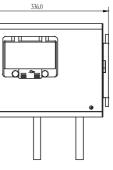
Fixed industrial socket



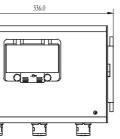


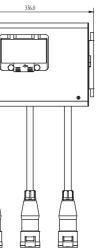
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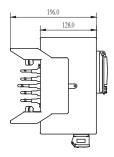


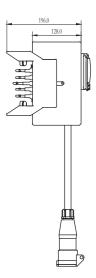






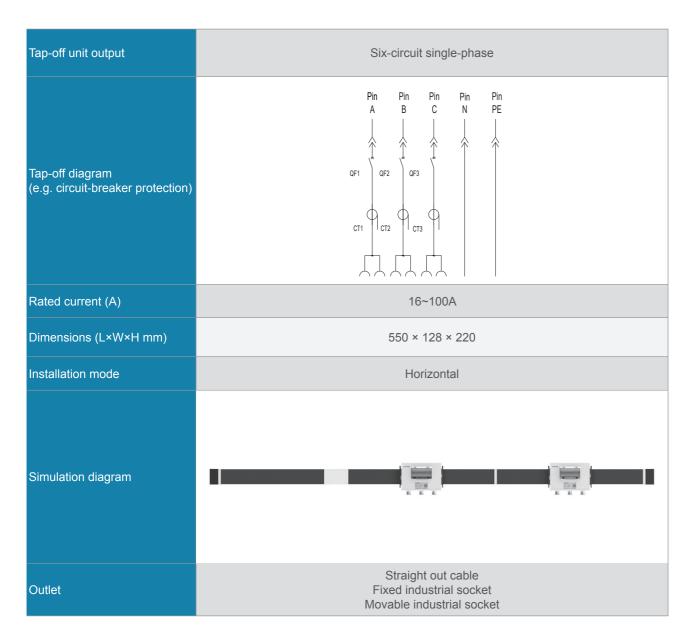
Movable industrial socket

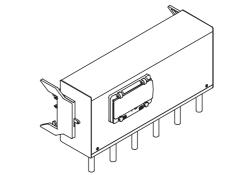


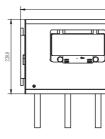




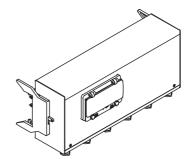
#### Outline dimension drawing of tap-off unit





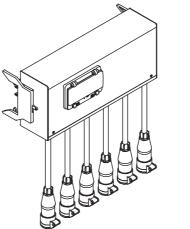


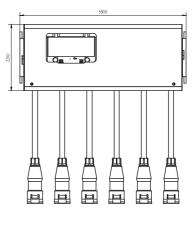


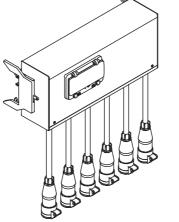




Fixed industrial socket



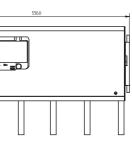


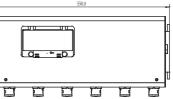




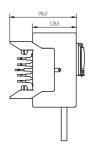
Movable industrial socket

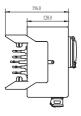
Note: The standard configuration is three-circuit single-phase, which can be customized according to user requirements.

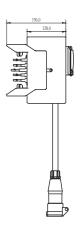




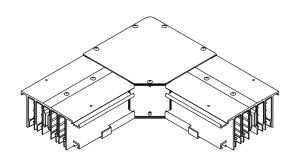


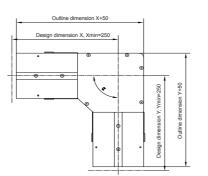






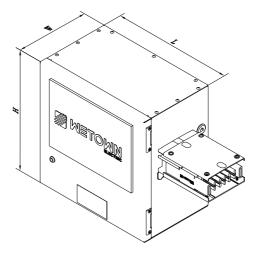




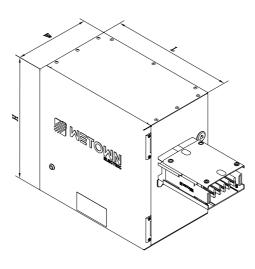


Noted:Customizable angle

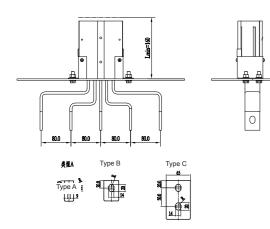
Feeder box with touch screen



Feeder box without touch screen

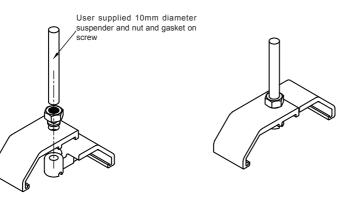


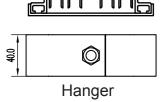




Flange end

125.0





35.0



# **WETOWN**

# Intelligent Monitoring Module

The functions of electric energy and temperature monitoring devices are listed below.

Function description of electric energy monitoring device IBT403-M1:

	IBT403-M1 Functional Table
	Phase/Line Voltage
	Current
	Active/reactive power
Measuring function	Apparent power
measuring function	Power Factor
	Mains Frequency
	Voltage/Current total distortion rate
	Fundamental voltage/current
	Positive/reverse with/without power
Metering function	Apparent energy
	Fundamental Forward/Reverse Active/Reactive Energy
	Daily extreme data recording (phase voltage, line voltage, current, power, power factor, grid frequency)
Extreme Value Record	Monthly extreme data recording (phase voltage, line voltage, current, power, power factor, grid frequency)
	Annual Extreme Value Data Recording (Phase Voltage, Line Voltage, Current, Power, Power Factor, Mains
	Frequency)
Data storage	Electrical parameters according to storage (phase/line voltage, current, active/reactive power, apparent power, power factor, grid frequency, voltage/current total distortion rate, fundamental voltage/current, forward/reverse active/reactive power, apparent power)
	Power data storage (forward/reverse with/without power, apparent power)
	Alarm information storage (voltage, current, active power, reactive power, power factor, grid frequency)
Parameter Settings	Threshold, Variation Ratio, and Other Parameter Settings

Function description of temperature monitoring device IBT403-T1:

IBT403-T1 Functional Form		
Measuring function	Four-way temperature measurement	
	Daily Temperature Extreme Data Logging	
Extreme Value Record	Monthly Extreme Temperature Data Logging	
	Annual Extreme Temperature Data Record	
Data ataraga	Temperature Data Storage	
Data storage	Alarm information storage	
Parameter Settings	Alarm Temperature Value Setting	

	IBT403-M1 Technical S
Working environment	
Operating Temperature	20 ° C to 60 ° C
Storage Temperature	25 ° C to 70 ° C
Relative humidity	≤ 93%
Operating Altitude	≤ 2500m
Protection Class	IP20
Insulation	Insulation resistance betw 100 MΩ
Pressure resistance	Voltage and current signal shall be AC2kV for 1 min, flashover.
Electromagnetic compatibility	
Antistatic interference	Level 3
Radiated resistance to radio frequency electromagnetic fields	Level 3
Electrical fast transient/burst immunity	Level 3
Anti-surge interference	Level 3
Voltage Input	
Range	Range 3 × 220V/380V
Resolution	0.1V
Overpressure	Continuous 1.2 times, inst
Current Input	
Range	External Current Transform
Communication Interface COM1	
Physical interface	RS 485
Communication port	Accessible to moving-ring
Communication Rate	9600, 19200 bps
Communication Protocol	Modbus-RTU
Communication Interface COM2	
Physical interface	RS 485
Communication port	Accessible to moving-ring
Communication Rate	9600, 19200 bps
Communication Protocol	Modbus-RTU

# Intelligent monitoring module

# Specification Sheet

mer

g or touchscreen or other communications equipment

g or touchscreen or other communications equipment

# **WETOWN**

Intelligent Monitoring Module

#### IBT403-T1 Technical Specifications:

	IBT403-T1 Technical Specification Sheet
Working environment	
Operating Temperature	20 ° C to 60 ° C
Storage Temperature	25 ° C to 70 ° C
Relative humidity	≤ 93%
Operating Altitude	≤ 2500m
Protection Class	IP20
Insulation	Insulation resistance between terminal and conductive parts of ENCLOSURE not less than 100 $\ensuremath{M\Omega}$
Pressure resistance	Voltage and current signal input, relay output, RS 485 communication, switching input shall be AC2kV for 1 min, leakage current shall be less than 2 mA, without breakdown or flashover.
Electromagnetic compatibility	
Antistatic interference	Level 3
Radiated resistance to radio frequency electromagnetic fields	Level 3
Electrical fast transient/burst immunity	Level 3
Anti-surge interference	Level 3
Temperature measurement	
Number of Input Routes	4 way
Measuring range	-20 to 120 ° C
Measuring accuracy	±1°C
Communication Interface COM1	
Physical interface	Accessible to moving-ring or touchscreen or other communications equipment
Communication Rate	9600, 19200 bps
Communication Protocol	Modbus-RTU
Communication Interface COM2	
Physical interface	Accessible to moving-ring or touchscreen or other communications equipment
Communication Rate	9600, 19200 bps
Communication Protocol	Modbus-RTU

#### IBT403-M1 Appearance Overview



AL TOPLES AL A A COM AL A COM

Powe
indic
1. Po
2. Ru
3. Co
4. Ala
Com
2 RS4
Volta
Curre
Softv
Insta

2 RS485



# Intelligent monitoring module

#### IBT403-M1

- er supply: AC220V
- cator light:
- ower indicator light
- unning indicator light
- ommunication indicator light
- larm indicator light
- nmunication port:
- 5485
- age access port
- rent access port
- tware upgrade interface
- allation method: guide rail installation

#### IBT403-T1

- Power supply: AC220V
- indicator light:
- 1. Power indicator light
- 2. Running indicator light
- 3. Communication indicator light
- 4. Alarm indicator light
- Communication port:
- Temperature measurement resistor access port
- Software upgrade interface
- Installation method: guide rail installation

# **METOMN**

# Product Code

# Pro S straight

#### Example:

PRS024252-3

PRS064252-1.5

			PRS	02 42 52 - 0
	Poducts series		Î	
PRS	Pro S Busway			
	Current class			
02	250A	_		
04	400A			
05	500A			
06	630A			
08	800A			
10	1000A			
	IP			
42	IP42			
Phas	e number/wire system			
52	3P5W			
	(m)			
	usway length (m)			
0.2	0.2m (Minimum length of feeder)	7		
3	3m			
(In 0.01 increments)				

# Pro S elbow

#### Example:

PRSLL064252-X0.25Y0.25A90 PRSLL044252-X0.5Y0.25A135

		_
Poducts series		
PRS	Pro S Busway	
Elbow		
LL	Horizontal left elbow	
Current class		
02	250A	-
04	400A	
05	500A	
06	630A	
08	800A	
10	1000A	
		_

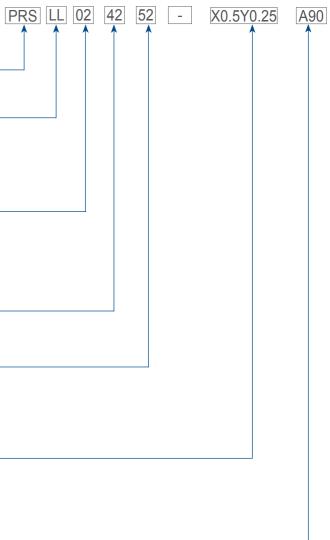
l	Р	
42	IP42	

Phase number/wire system		
52	3F	25W

Elbow length X, Y (m)	
X0.25	X0.25m (min value)
Y0.25	Y0.25m (min value)
(In 0.01 increments)	

Elbow angle		
A90	90 ° right angle elbow	
A135	135 ° elbow	
(In 1 increments)		

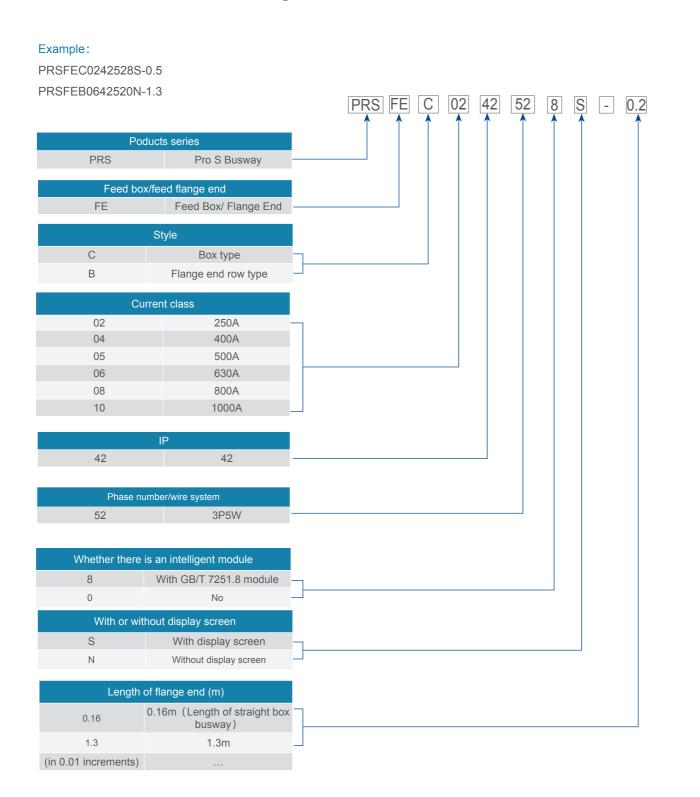






# Product Code

# Pro S feed box/feed flange end



# Pro S tap-off unit

#### Example:

PRSPRV0642318 PRSPRH1242330

Poo	ducts series		
PRS	Pro S Busway		
Tap-off unit			
PR	Tap-off unit		
Box type			
Н	Vertical	_	
V	Horizontal	1-	
	irrent class		
01	16A		
03	32A		
04	40A		
05	50A		
06 08	63A 80A		
10	100A		
12	125A		
12	IP		
42	42		
42	42		
No. of output circuits	&No. of circuit breaker poles		
11	1-way output single pole circuit breaker		
31	3-way output, single pole circuit breaker		
33	3-way output, 3-pole circuit breaker		
61	6-way output, single pole circuit breaker		
63	6-way output 3-pole circuit breaker		
Whether there	is an intelligent module		
8	With GB/T 7251.8 module		

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