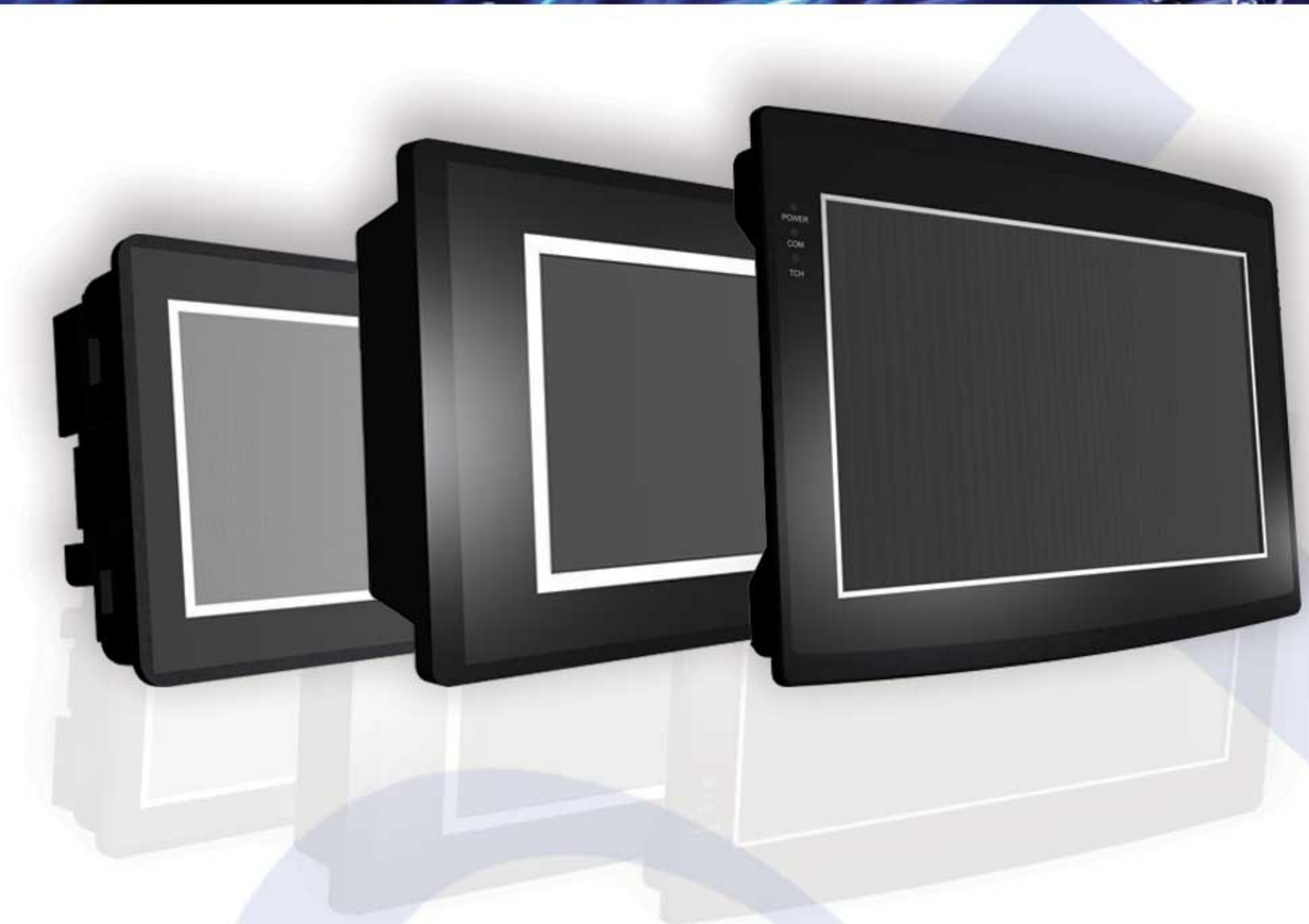
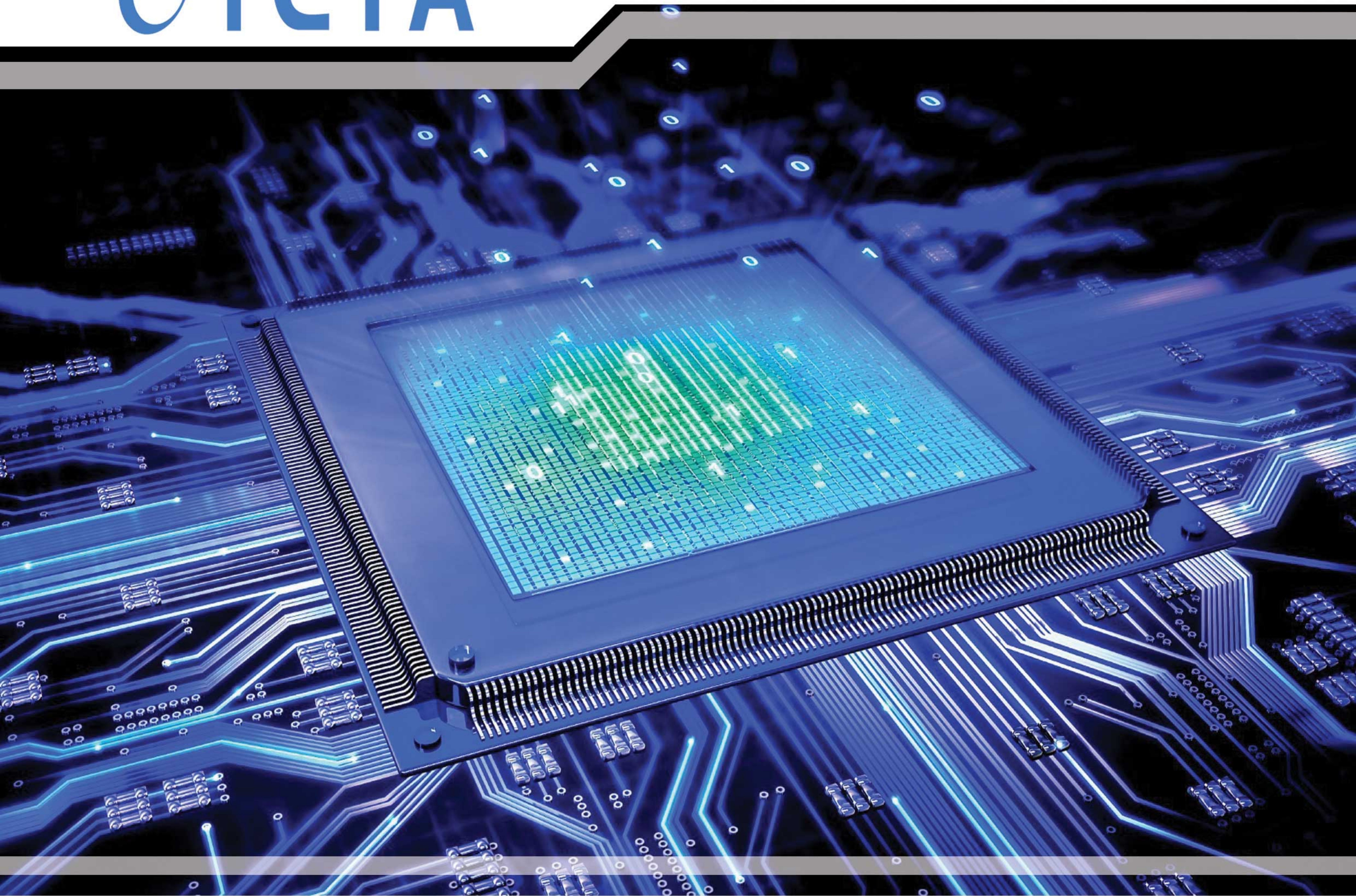


ETETA



Human Machine Interface



Programmable Logic Controller

www.tetaelectric.com

info@tetaelectric.com



NO 39 Lin Hai Road HaiGuan Town NiCheng Pudong New Area Shanghai CHINA

Recipe Browser

- Massive recipe data supported
- Recipe transfer is controlled by PLC
- Easily change the recipe name and formula on HMI

Administration

- Level to level administration ensure your data and operation on HMI is secured
- All operation history will be recorded



Installments

- Maximum 12 payments
- Dynamic password setting
- Flexible and simple password setup

SMS module

- The HMI data can be monitored though SMS messages
- The HMI can be controlled by SMS message

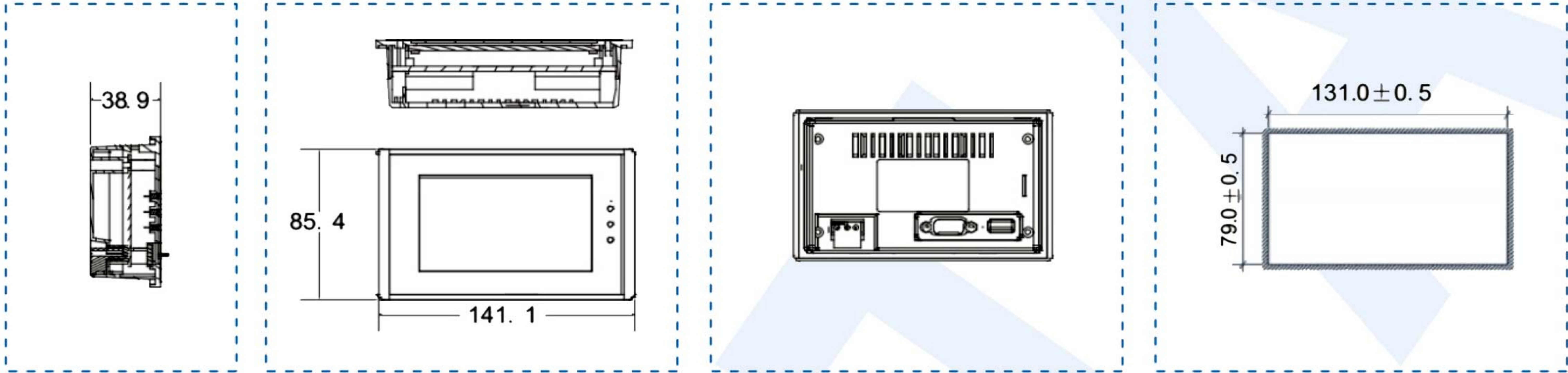
TP Series Specifications

TETA TH-SERIES

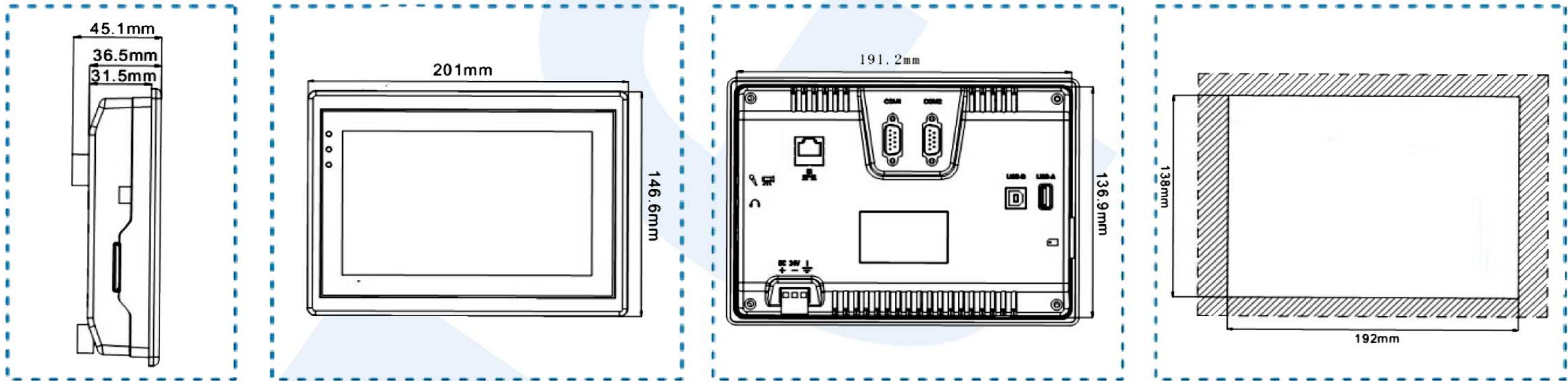


Model		TH 04	TH 07	TH 10
General	Screen size	4.3 inch	7 inch	10.2 inch
	resolution	480*272	800*480	800*480
	color	65536 color		
	brightness	300 cd/m ²		
	backlight	LED		
	touch screen	high precision four-wire resistive		
	backlight life	50000 hours		
	CPU	32-bits 400MHZ RISC		
	storage	128M FLASH + 64M DDRAM		
	RTC	256KB		
	printer port	USB printer/serial port printer		
	USB port	USB Host +USB client		
	COM	COM1	RS232/RS422/RS485	RS232/RS422/RS485
		COM2	-	RS232/RS485
		COM3	-	OPTIONAL
power	power	<5W	<8W	<8W
	power supply	DC 24V (12~28V DC)		
	allowed power fail	<5MS		
	insulation resistance	>20MΩ 500 VDC		
	withstand voltage	500V AC<1 Minute		
Dimension	shell	ABS , BLACK		
	dimension (mm)	138.0W*86.0H*37.0D	212.0W*146.0H*36.0D	272.0W*190.5H*36.0D
	mounting size (mm)	131.0W*79.0H	192.0W*138.0H	260.0W*179.0H
	Net/Gross (kg)	0.3/0.6	0.6/1.0	1.2/1.7
Environment	temperature	Working temperature(-10~60) storage temperature(-20~70)		
	humidity	Working humidity(-10~90) storage humidity(-10~90)		
	seismic resistance	10~25 HZ (X,Y,Z direction 2G/30 minutes)		
	cooling	Air cooling		
Extension	ethernet	-	TH 07-N	TH 10-N
	CAN	TH 04-C	TH 07-C	TH 10-C
	TTS	-	TH 07-TTS	TH 10-TTS
	COM3	-	TH 07-E	TH 10-E
protection		IP65(FRONT PANEL)		

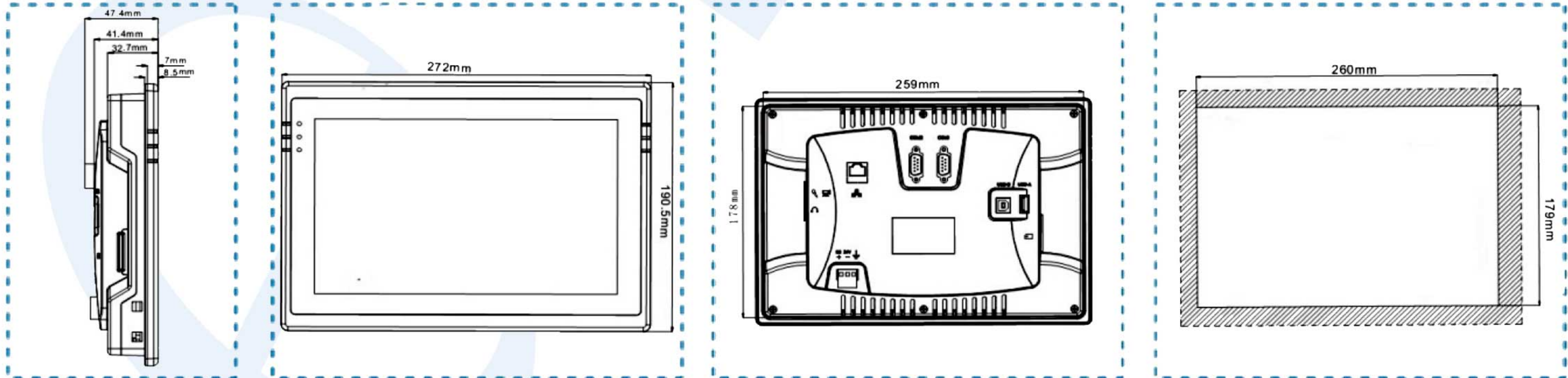
TH-04



TH-07

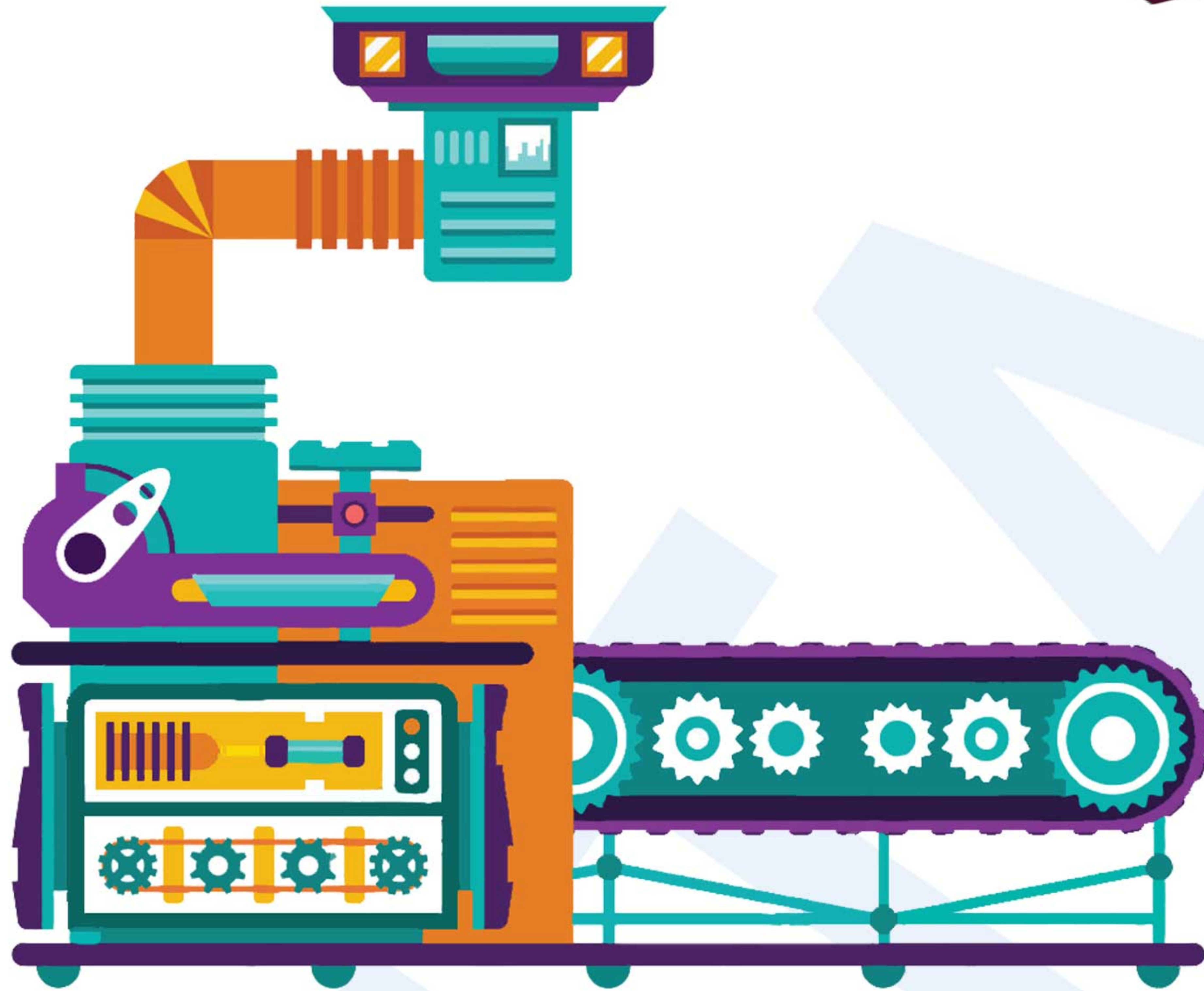


TH-010



DEVICE SUPPORT

Manufacturer	Model / Protocol
Emerson	DKG2,EC20 SERIES
allen-bradley	MICROLOGIX 1000/1500
Delta	DVP SERIES
TETA	TP SERIES
Panasonic	FP SERIES
omron	CS/CP SERIES , FINS PROTOCOL/CJ
mitsubishi	A SERIES/1N/2N/3U/Q SERIES/L02
siemens	S7-200/S7-300(PPI,MPI)
siemens(ethernet)	S7-300/1200/200 SMART
TECO	TP01/02/03 SERIES
hollysyz	LK/LM MODBUS TCP
fatek	FATEK SERIES/TCP ASCII
schneider	TWIDO/MODICON
ashrae	BACNET
LG	K120S/K300S
inovance	WHOLE SERIES
profibus	PROFIBUS
crouzet	CROUZET M3 (FBD)
modbus RTU	SLAVE/MASTER
modbus ASCII	SLAVE/MASTER
modbus TCP/IP	SLAVE/MASTER
vigor	VIGOR PLC
nanda automation	MODBUS TCP/ASCII TCP
can bus	J1939/CAN
siemens	USS
danfoss	FC SERIES INVERTER
wecon	LX SERIES/USER-DEFINED PROTOCOL



USB/Multi-serial port



- USB monitoring and transferring data with PLC
- Maximum 6 protocol supported
- Easy PLC interconnections setup

Kernel Encryption



- Unique Kernel Encryption
- Multiple security protection to prevent cracking

High Speed counter



- 6channels high speed counter
2*200k, 4*10k
- 2channels AB pulse input
- Built-in 32bit high speed comparator

PID Control



- PID auto-tuning
- Quick response, great stability, smooth curve
- Easy configuration

High Speed Pulse



- Maximum 4 channels pulse output
200k*2, 100k*2
- Ramping, positioning pulse output

- Multi-Expansion connection
 - a.Maximum 16 analog Expansion (requires additional power supply)
 - b.Maximum 8 I/O Expansion
- AD Expansion resolution:16bits
- DA Expansion resolution:12bits
- PT/TC Expansion resolution:14bits
 - 1. PT100 sensor:-100~+600(degree centigrade)
 - 2. K type sensor:-100~+1200(degree centigrade)
 - 3.J type sensor-100~+600(degree centigrade)
 - 4. Compatible with PID commands



Weight Expansion

- Acquisition resolution:24bits
- Weight calibration
- Display gross or Net weigh,tare is adjutable
- Reset:rearrange all configurations to default
- Stability Check
- Auto-zero

Setting	Frequency
0	7.5Hz
1	10 Hz
2	25 Hz
3	50 Hz
4	60 Hz
5	150 Hz
6	300 Hz
7	600 Hz
8	960 Hz
9	2400 Hz



Mixed type

Low cast

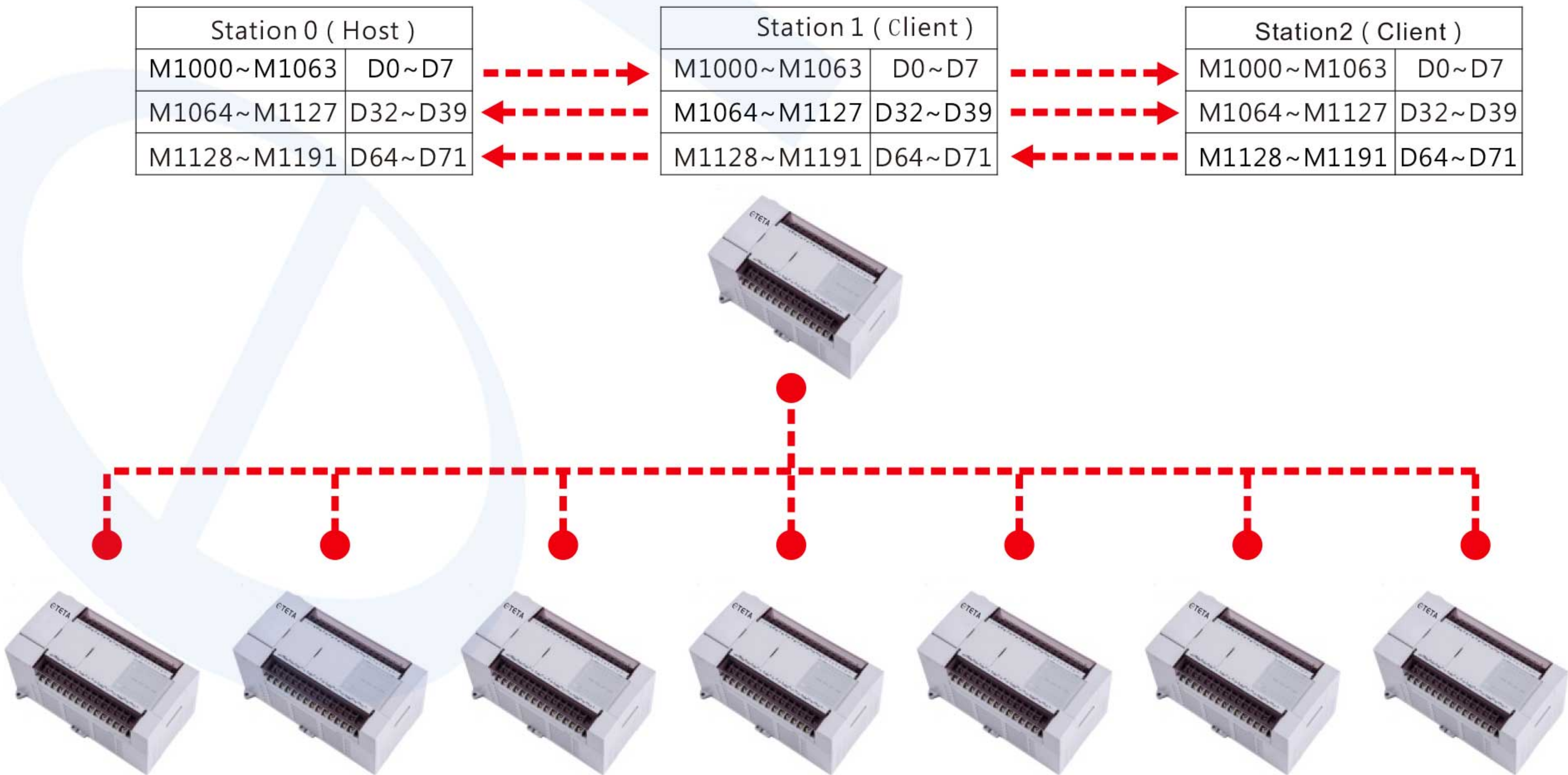
Small size

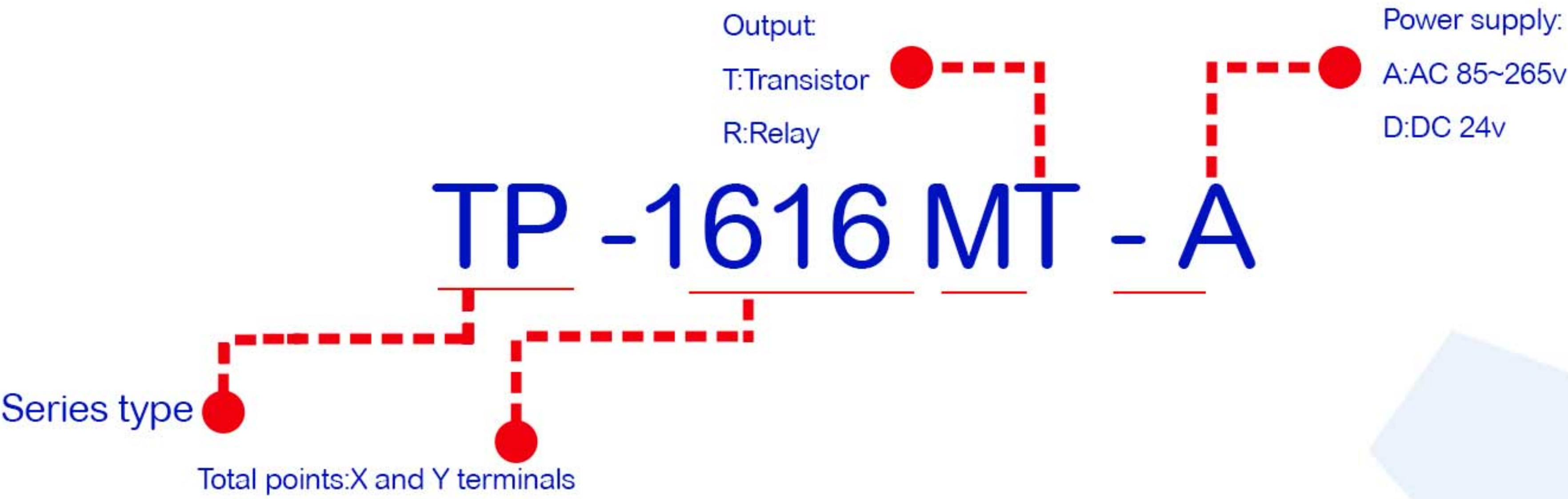
Dual card access

Model	Resolution	Input / Output Range	Data Range
DA	12	Output Current 4~20mA	0~2000
AD	12	Input Current 4~20mA	0~2000
PT	14	Sensor: PT100 -100~600°	-1000~6000
TC	14	Sensor: K type -100~1200°	-1000~12000
		Sensor: J type -100~600°	-1000~6000
DAV	12	Output Voltage: -10~10V	-2000~2000
ADV	12	Input Voltage: -10~10V	-2000~2000

TP N:N

- Maximum 8 TP series PLC can be connected though RS485 protocol to communicate
- 5mode to choose,depend on required total connection address
- Quick data refresh





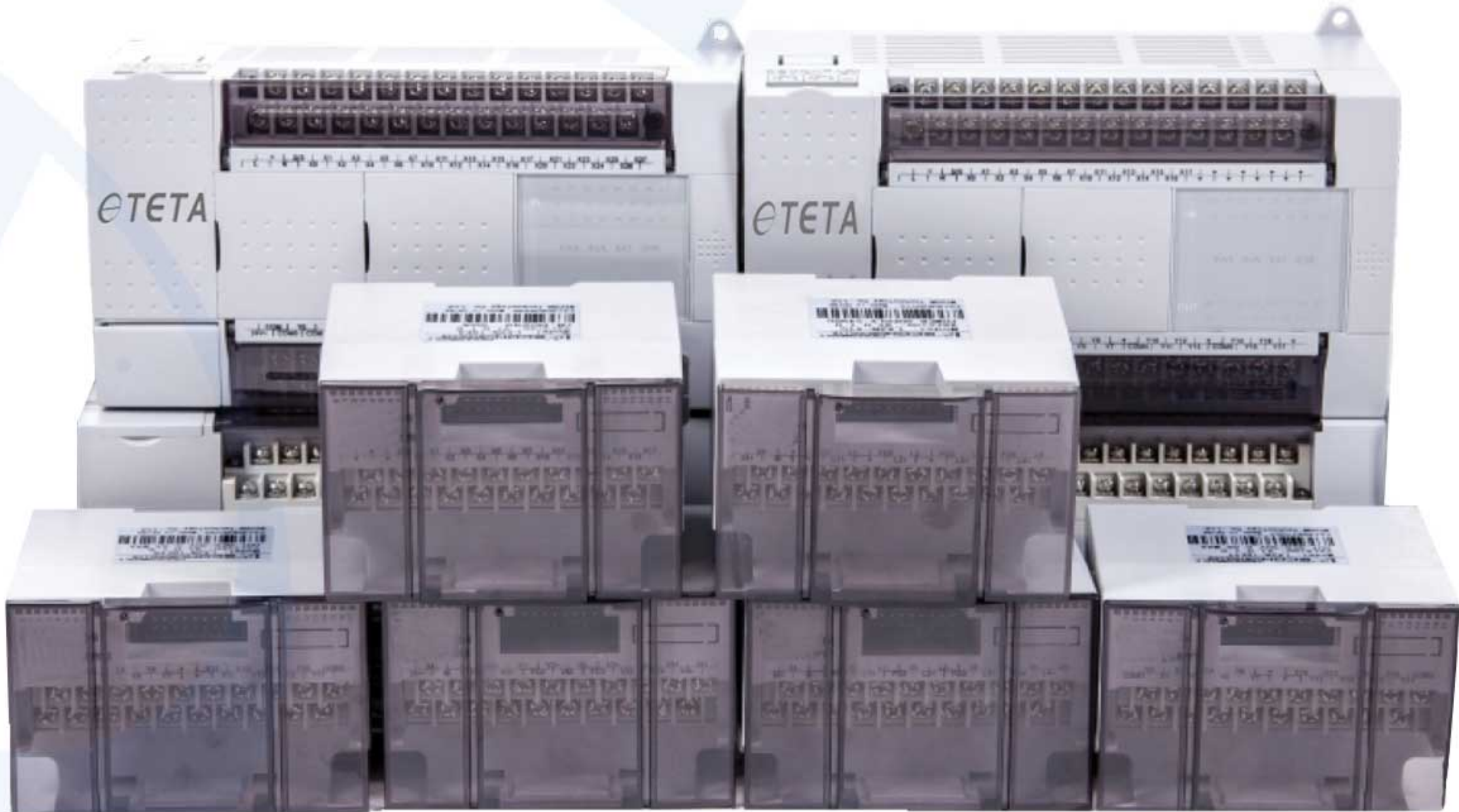
PLC Model	I/O	Dimension (mm)	Pulse Counter	Pulse Output	RS485	card	Expansion	Power Supply	Output Type
TP-0806MR-A/D	8/6	75*107*87	2	0	1	1	NO	AC/DC	Relay
TP-0806MT-A/D	8/6	75*107*87	2	2	1	1	NO	AC/DC	Transistor
TP-1208MR-A/D	12/8	75*107*87	2	0	1	1	NO	AC/DC	Relay
TP-1208MT-A/D	12/8	75*107*87	2	2	1	1	NO	AC/DC	Transistor
TP-1212MR-A/D	12/12	136*107*87	2	0	1	2	YES	AC/DC	Relay
TP-1212MT-A/D	12/12	136*107*87	2	2	1	2	YES	AC/DC	Transistor
TP-1412MR-A/D	14/12	136*107*87	2	0	1	2	YES	AC/DC	Relay
TP-1412MT-A/D	14/12	136*107*87	2	2	1	2	YES	AC/DC	Transistor
TP-1616MR-A/D	16/16	175*107*87	2	0	1	2	YES	AC/DC	Relay
TP-1616MT-A/D	16/16	175*107*87	2	2	1	2	YES	AC/DC	Transistor
TP-2416MR-A/D	24/16	175*107*87	2	0	1	2	YES	AC/DC	Relay
TP-2416MT-A/D	24/16	175*107*87	2	2	1	2	YES	AC/DC	Transistor
TP-3624MR-A/D	36/24	221*107*87	2	0	1	2	YES	AC/DC	Relay
TP-3624MT-A/D	36/24	221*107*87	2	2	1	2	YES	AC/DC	Transistor

PLC Expansion

Module	Specification	Module	Specification
TP-8EX	8 Input	TP-4AD	4 * Analog Input
TP-8EYR	8 Relay Output	TP-4DA	4 * Analog Output
TP-8EYT	8 Transistor Output	TP-2AD	2 * Analog Input
TP-16EX	16 Input	TP-2DA	2 * Analog Output
TP-16EYR	16 Relay Output	TP-4PT	4 * Thermal Resistance Input
TP-16EYT	16 Transistor Output	TP-4TC	4 * Thermocouple Input
TP-1WT	1 * Weighting	TP-4LTC	4 * TC with Isolation (PID Control)
TP-2WT	2 * Weighting	TP-2PT	2 * Thermal Resistance Input
TP-1PG	1 * Pulse Output	TP-2TC	2 * Thermocouple Input
TP-1PSU	Extended Power Supply Module		

PLC Card

BD Board	Function	BD Board	Function
TP-2AD2DA-BD	2 * Analog Input/ Analog Output (4~20mA)	TP-2DA-BD	2 * Analog Output (4~20mA)
TP-2ADV2DAV-BD	2 * Analog Input/ Output (-10V~10V)	TP-2PT-BD	2 * Thermal Resistance Input
TP-2PT2DA-BD	2 * Thermal Resistance Input/ 2 * Analog Output (4~20mA)	TP-2TC2DA-BD	2 * Thermocouple Input/ 2 * Analog Output (4~20mA)
TP-2TC-BD	2 * Thermocouple Input	TP-2RS485-BD	2 * RS485 Communication
TP-4ADI-BD	4 * Analog Input (4~20mA)	TP-CAN-BD	1 * CAN Communication
TP-4ADV-BD	4* Analog Input (-10V~10V)	TP-ETH-BD	1 * Ethernet Communication



General

Running Mode	Round Scan/ Interrupt
Programming	Instruction List/ Ladder
Total Instructions	Basic Instructions: 27 / Applied Instruction: 136+2
Execute time	Basic Instructions: 0.06us / Applied Instruction: 1~10us
System Storage	16K
Download/ Monitoring	Serial Programming Cable / Mini USB
High Speed Pulse Output	Transistor: 2 channels (4 channel optional) / Relay N/A (2 channel optional)
External Interrupt	6 Channels
Timer Interrupt	3 Channels
Holding Addresses	Adjustable
Storage	FLASH
Filter	For all X input terminals
Serial Port	COM1 RS422 or RS485 COM2 RS485
Temperature	Working Temperature 0 ~ 55 Storage Temperature 0 ~ 70
Humidity	35 ~ 85%RH Without condensation
Shock Resistance	JIS C 0040 Standard
Noise Immunity	Noise Voltage: 1000Vp-p Pulse Width: 1us Frequency: 30~100Hz (Noise Simulator)

Output

Item		Relay Output	Transistor Output
Output Mode		--	NPN
Input Power Supply		DC 24V	DC 24V
Output Circuit		<AC 250V DC 30	DC 5~30V
COM Port Current		--	<0.1mA DC 30V
Insulation		Mechanistic	Optical Coupling
Leak current		--	0.1mA / DC 30V
Min. Load		--	DC5V 2mA
Max. Load	Resistive	2A point 8A COM port	0.5A point 0.8A COM port 0.3A HSPO point
	Inductive	80VA	12W/DC24V 7.2W HSPO point
	General	100W	0.9W/DC 24V
Response Time	ON	<10ms	<0.2ms
	OFF		Pulse output terminal <5us

AC Power Supply

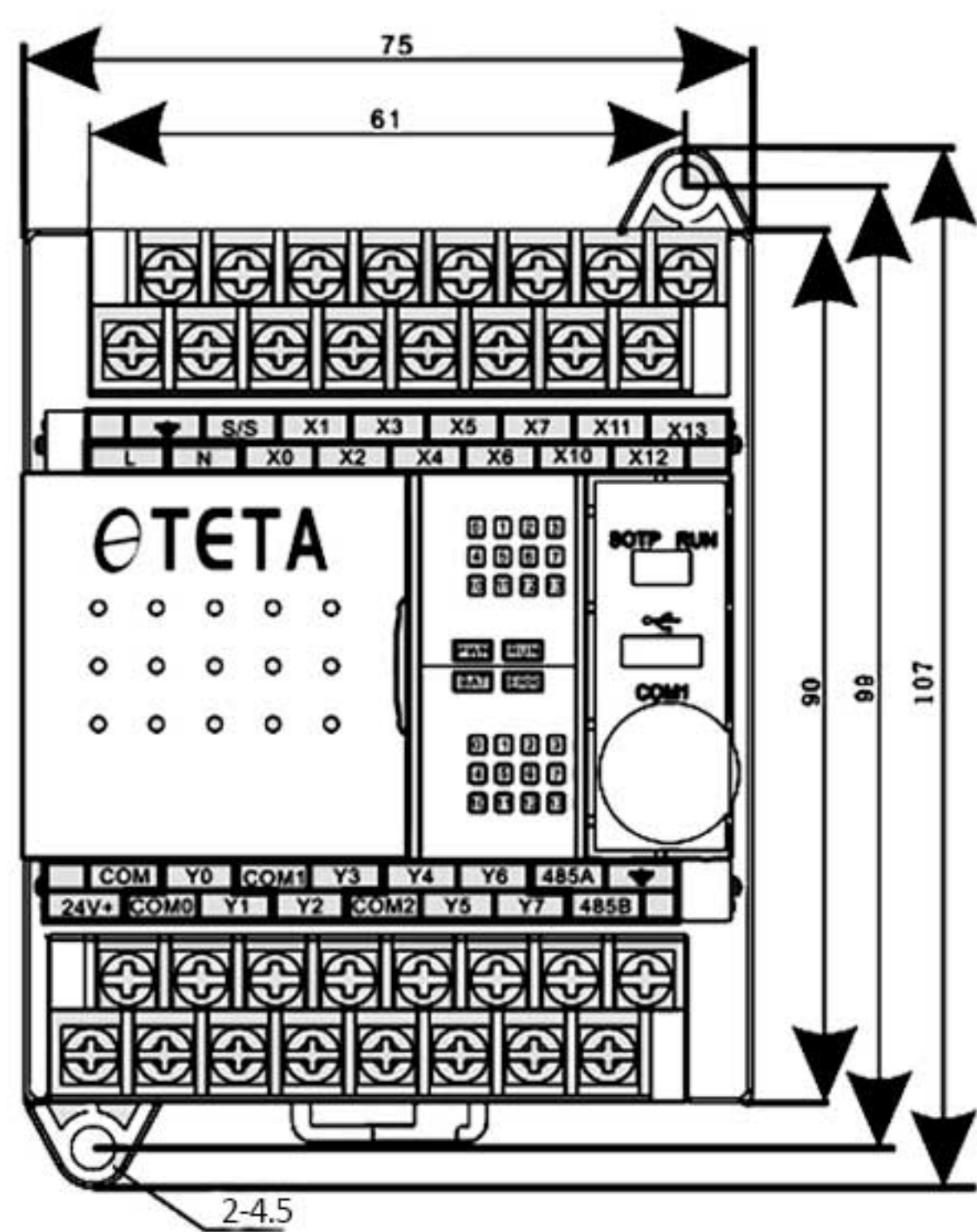
Item	TP-0806M/ 1208M/ 1212M/ 1412M	TP-1616M/ 2416M/ 3624M
Voltage	AC 100~240V 50 ~ 60Hz	
Power Outage Time	10ms	
Rush Current	<15A 5ms / AC 100V; <30A 5ms / AC 200V	
Power Fuse	250V 1A	250V 3.15A
Power Consumption	<35W	<60W
Power Output	DC 24V 850mA	DC 24V 700mA

DC Power Supply

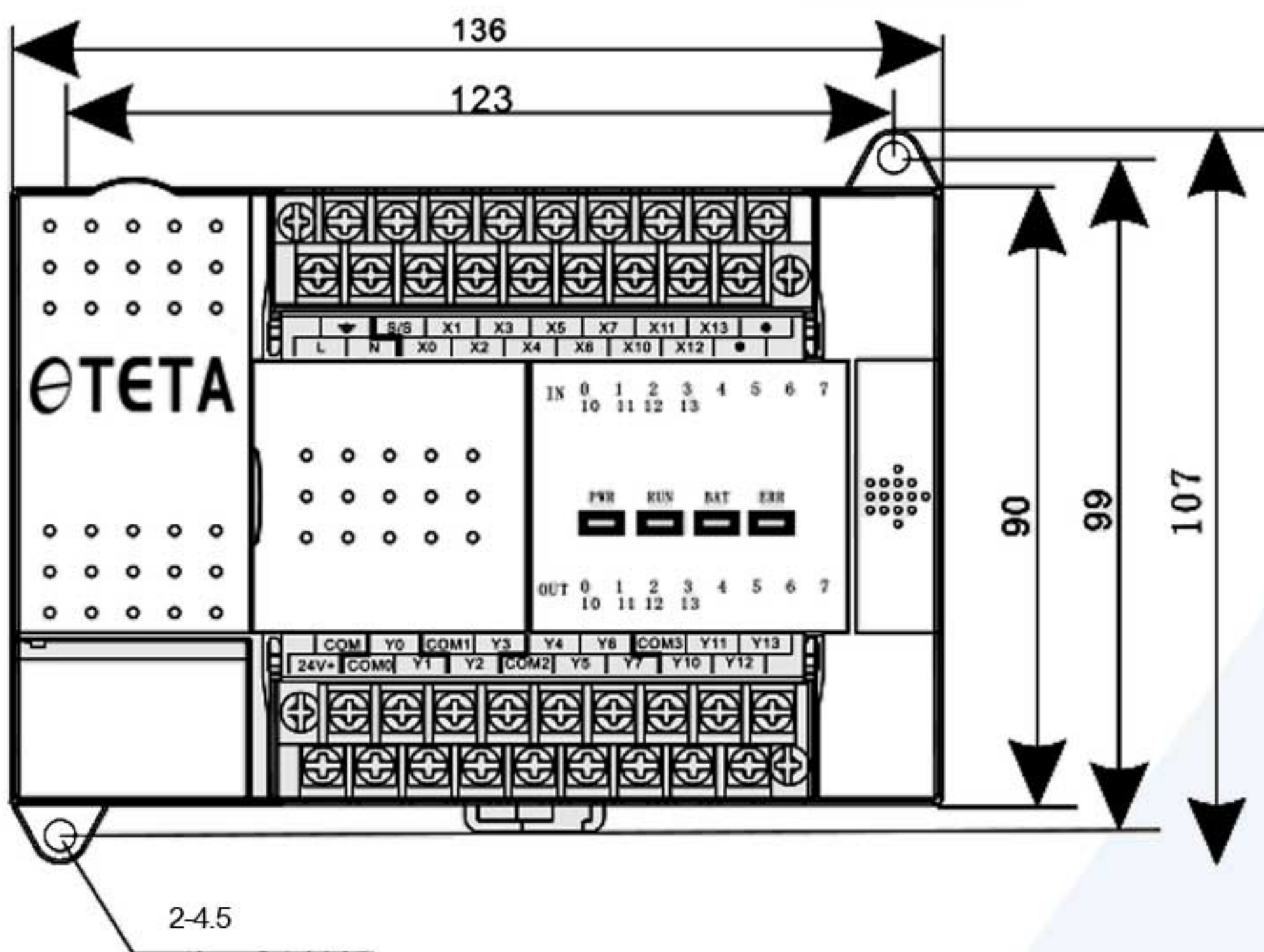
Item	TP0\TP1\TPE
Power Supply	DC 24V±10%
Power Outage Time	10ms
Power Fuse	250V 3.15A
Rush Current	<15A 1ms / DC 24V
Power Consumption	<30W



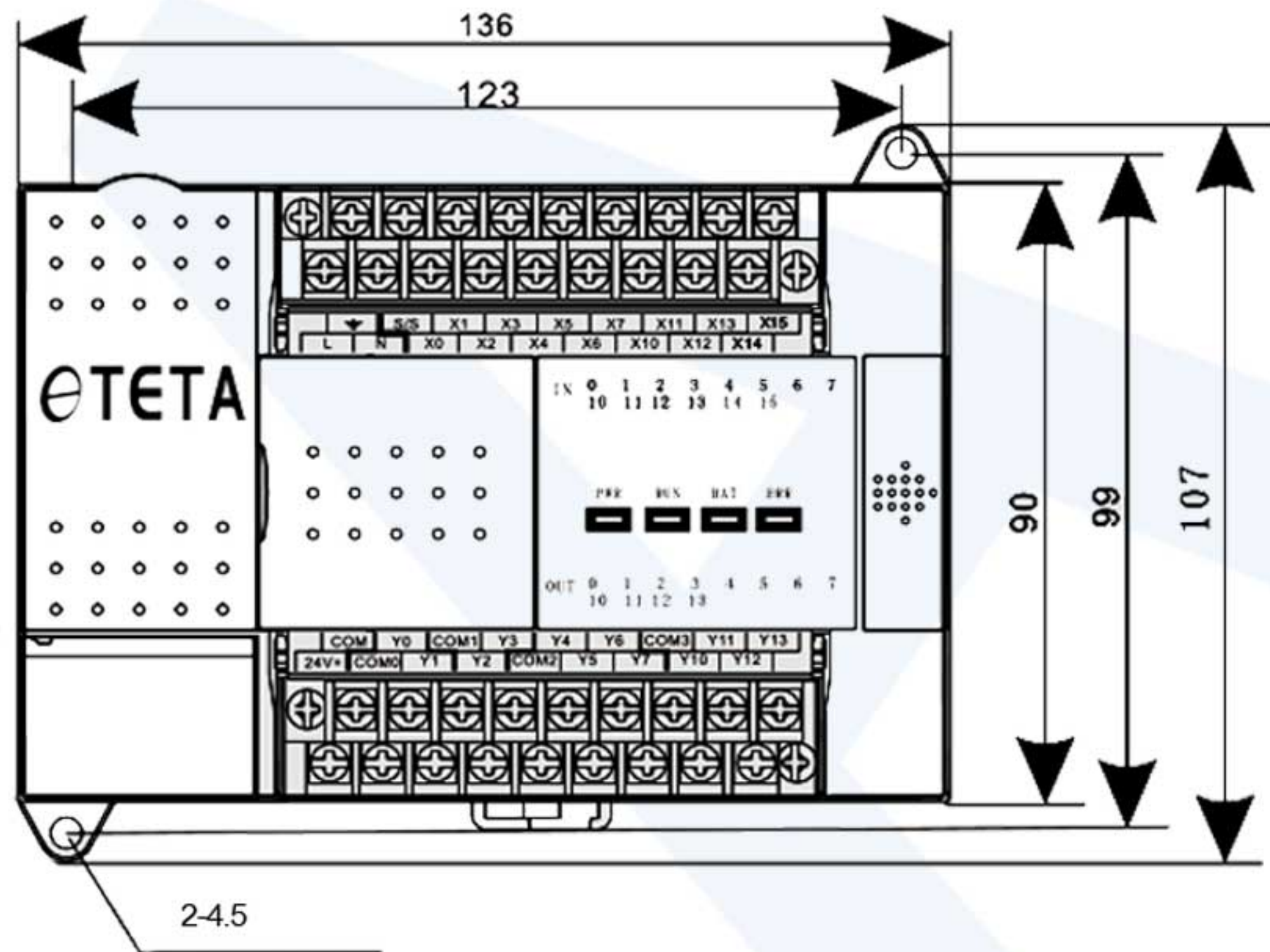
Main



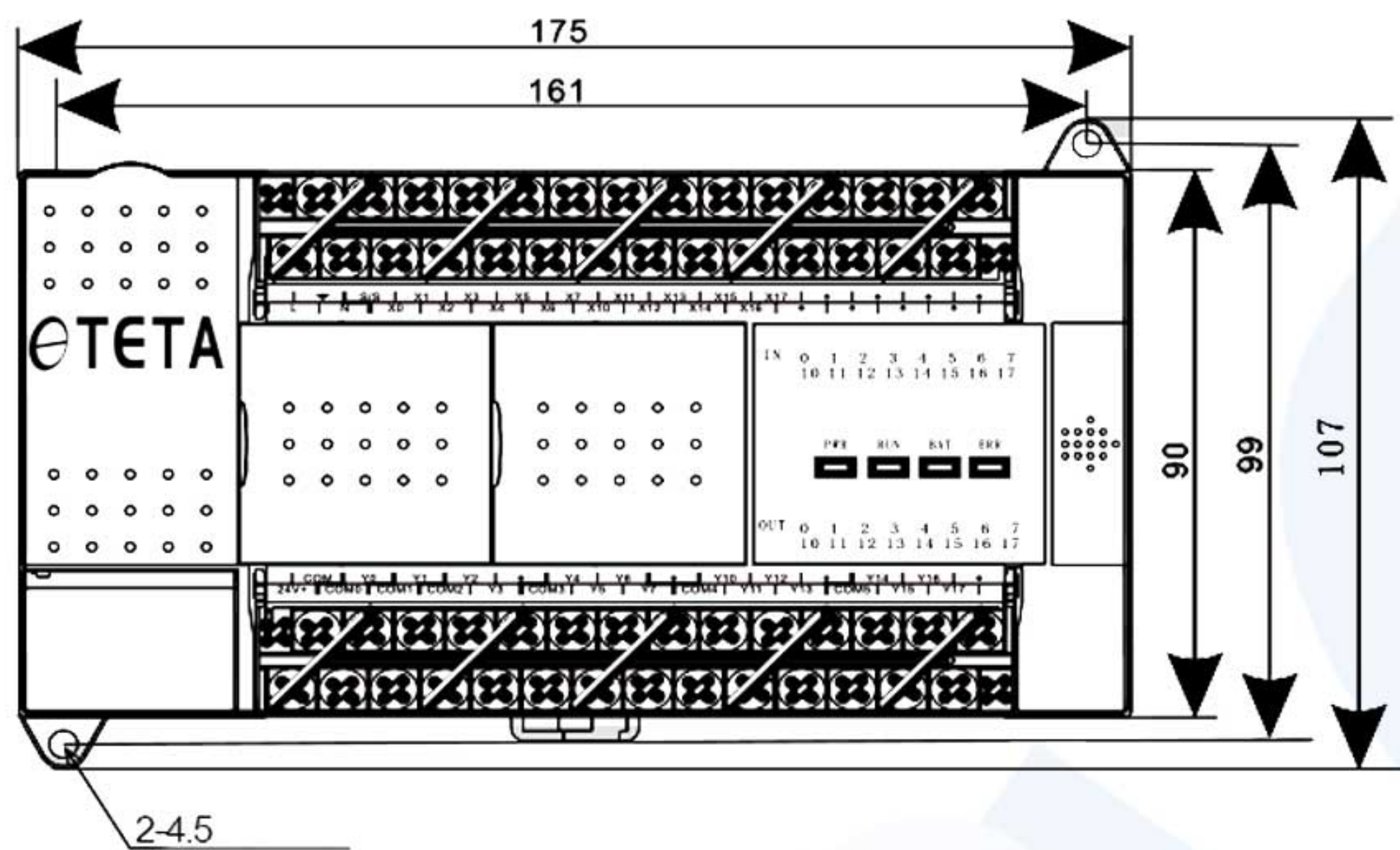
0806 / 1208



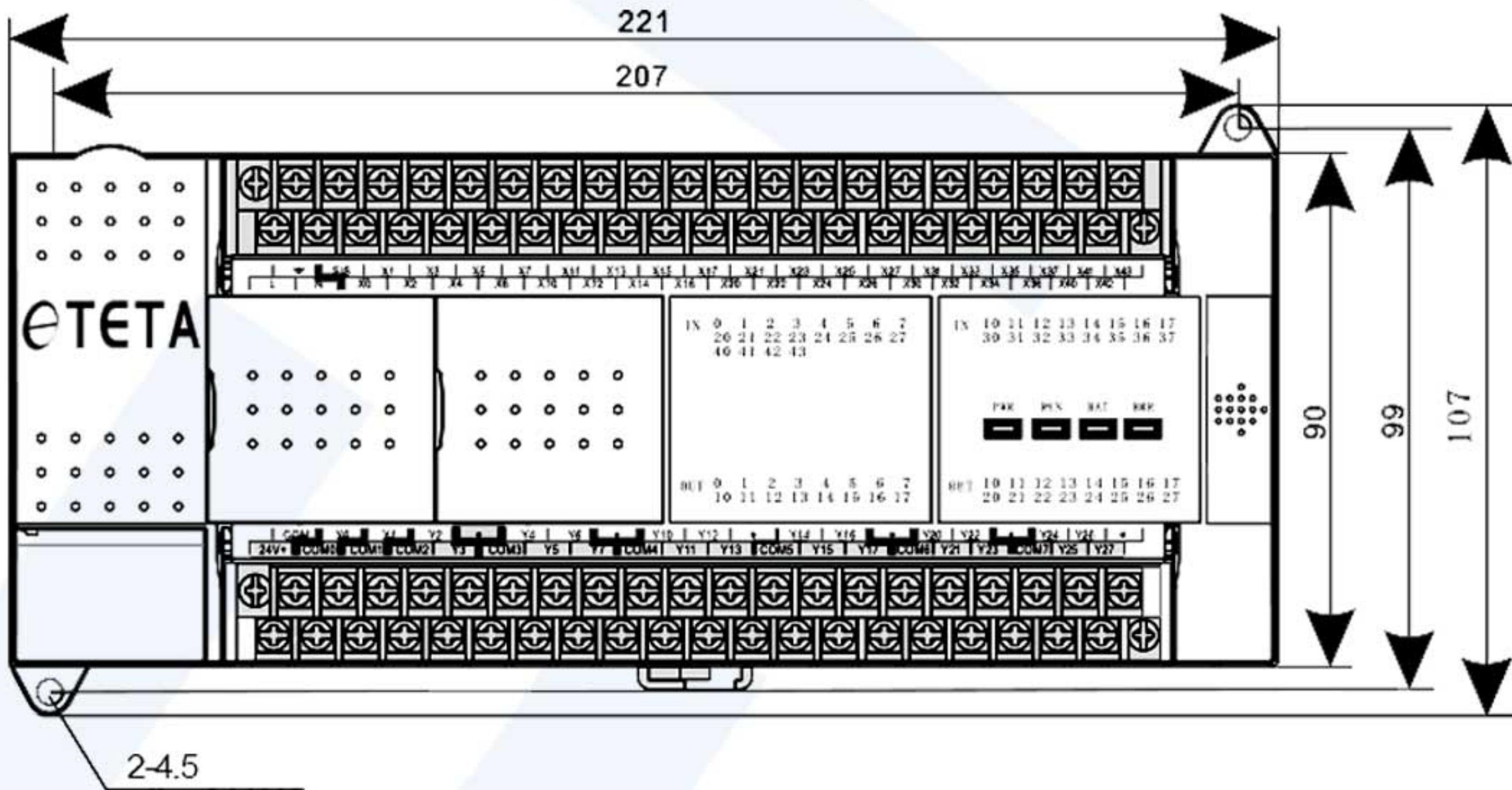
1212



1412

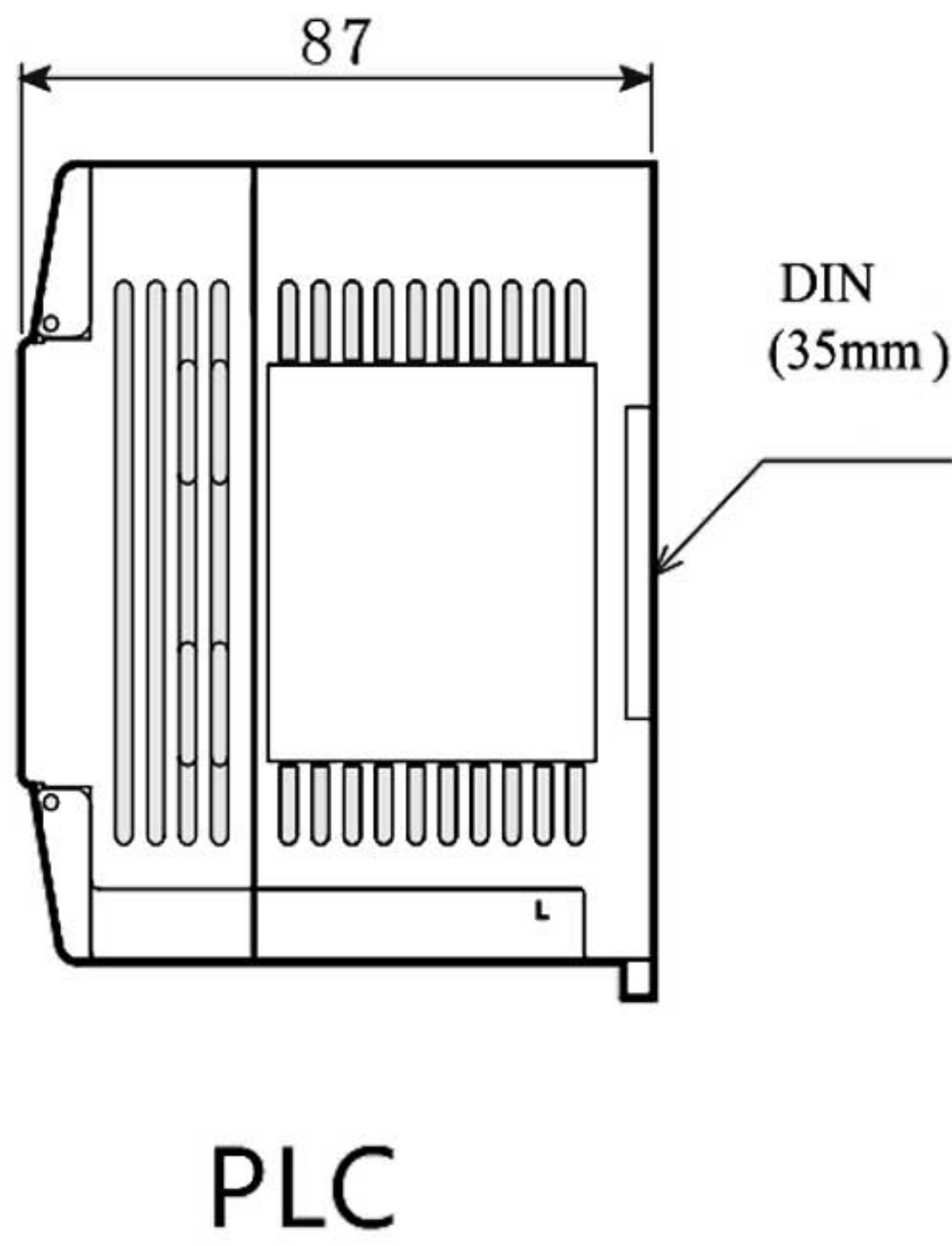
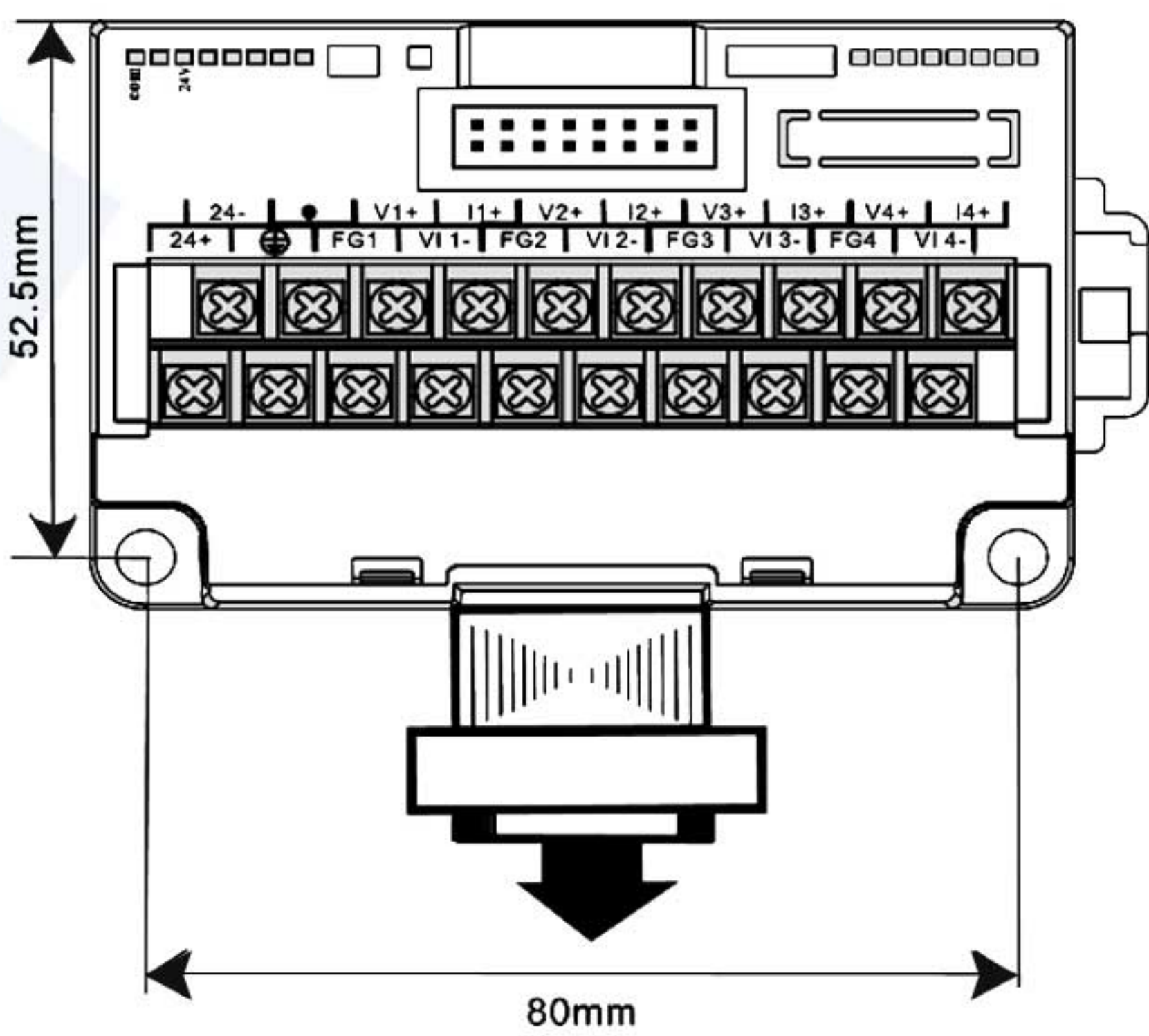
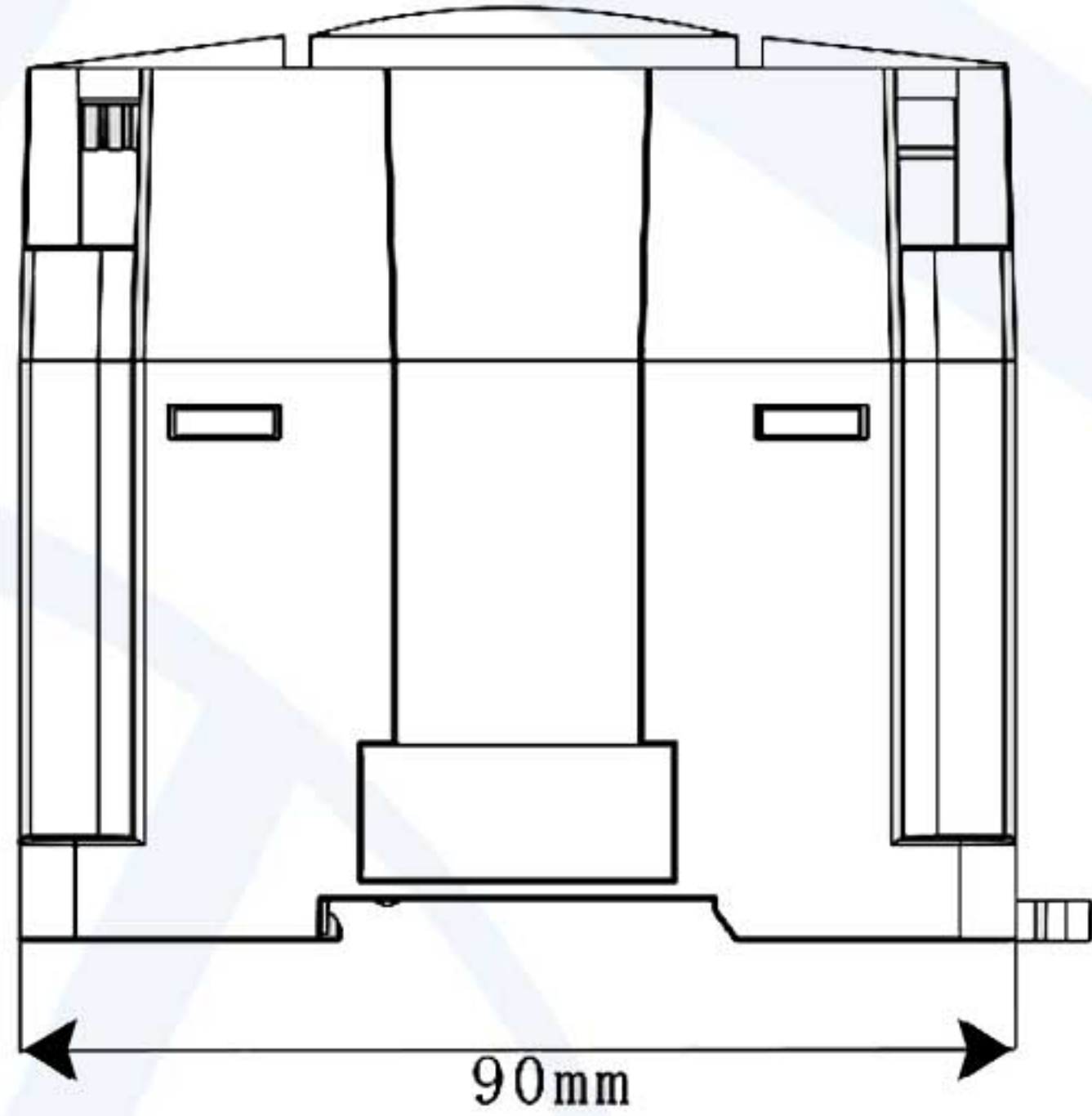
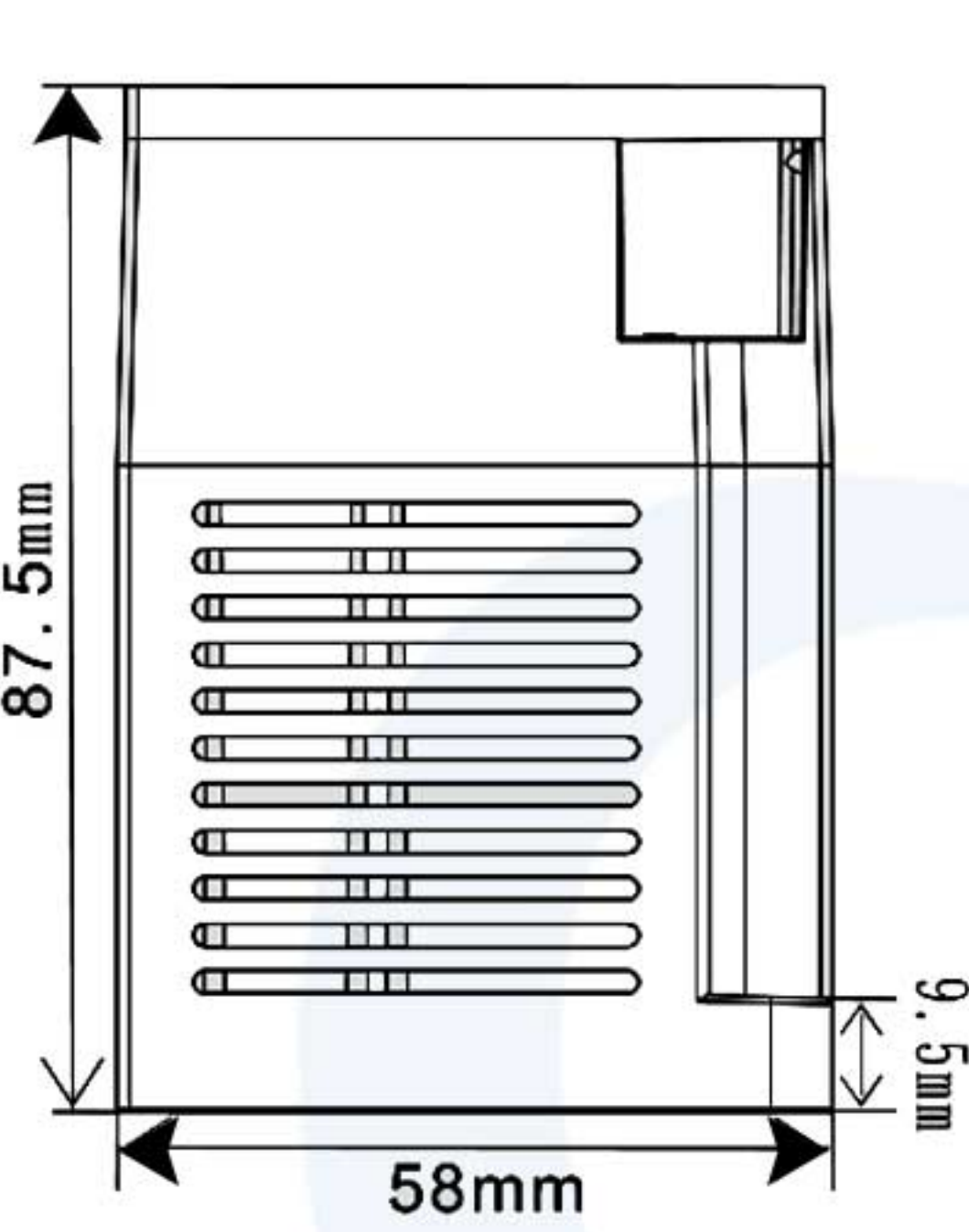


1616



3624

Expansion



PLC