

PRODUCT GUIDE

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# CIMON

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SCADA | IPC | HMI | PLC

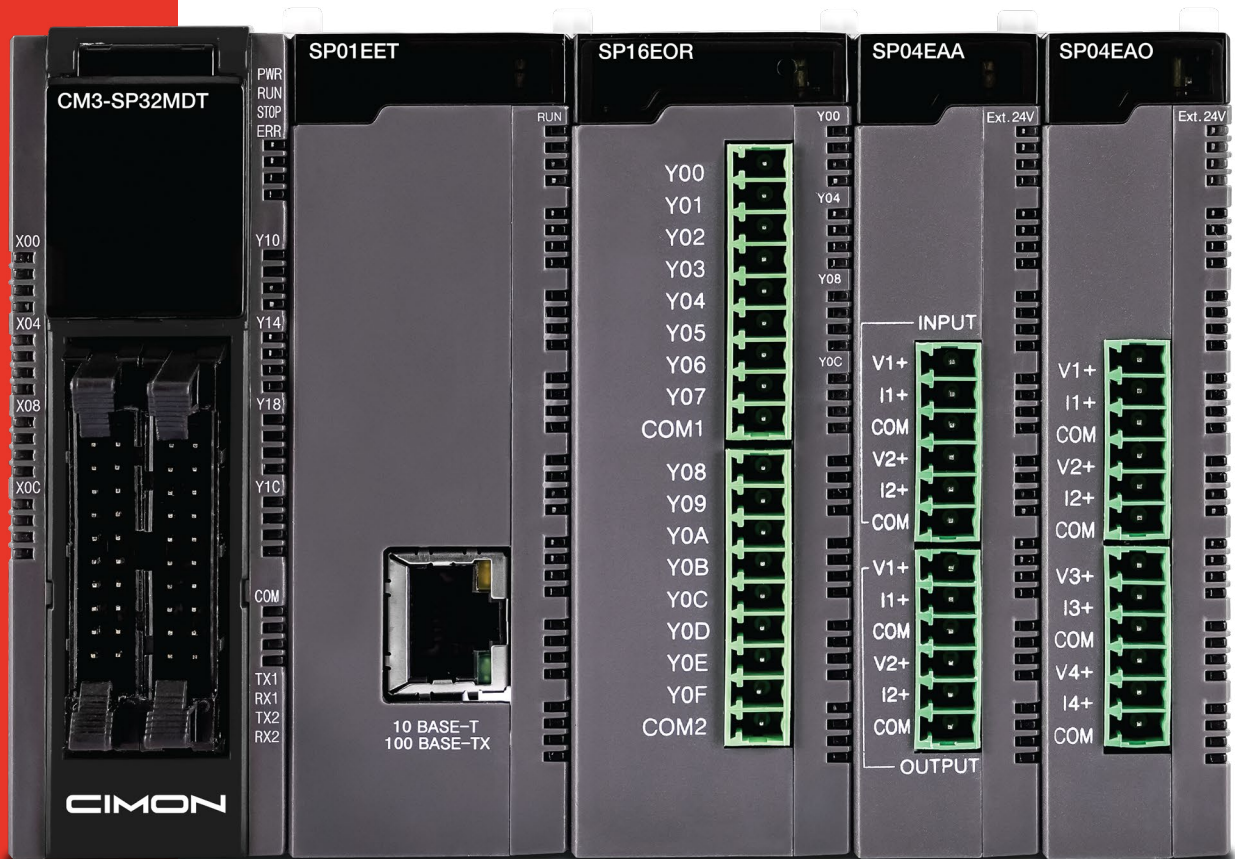


# CIMON PLC



CIMON offers the most reliable and cost-effective controllers for a wide range of automation systems. Our PLC lineup is comprised of the UP Series, XP Series, CP Series, PLC-S Series, and Micro-S Series to accommodate a vast variety of applications.

# MINI-MODULAR PLC PLC-S



CIMON's CM3 PLC-S mini-modular PLC are tailored for simple to medium complexity machine control and remote automation tasks, offering versatile communication and I/O functionalities. They can accommodate up to 384 I/O points with CM3 expansion I/O modules and have built-in features, including Ethernet connectivity, high-speed counting (HSC), pulse-train output (PTO) motion control, and proportional-integral-derivative (PID).



### EMBEDDED I/O

Up to 16 discrete inputs and up to 16 discrete outputs.



### COMPACT & EASY EXPANSION

Ultra-compact design with expandability up to 384 I/O, tailored for small to medium applications.



### PID

Calibrate any application apparatus to achieve a steady state using calculus-based algorithms.



### HIGH-SPEED COUNTING

Interface with encoders to count pulses at extreme speeds up to 20 kHz.



### MOTION CONTROL

Generate speeds up to 100 kHz of pulse train output.



### INSTALLATION

Capable of DIN rail mounting, offering space optimization, modularity, and enhanced safety.



### CICON SOFTWARE

Complimentary programming software used to program CM1 and CM3 PLCs.



### COMMUNICATION DRIVERS

Supports Modbus RTU/TCP, User Protocol RTU/TCP, and CIMON protocol, with built-in Ethernet and serial ports in the CPU for versatile connectivity.



**PLC CM3 SERIES**

<b>CPU MODULE</b>						
Product #	CM3-SP32MDTF-SD	CM3-SP32MDCF-SD	CM3-SP16MDTF	CM3-SP16MDCF	CM3-SP16MDRF	CM3-SP16MDRV
Software	CICON					
Power	12/24 VDC, Expandable					
Discrete Input	16, Sink/Source, 12/24 VDC		8, Sink/Source, 12/24 VDC		8, Sink/Source, 12/24 VDC	
Discrete Output	16 Sink 12/24 VDC, 0.2A/pt	16 Source 12/24 VDC, 0.2A/pt	8 Sink 12/24 VDC, 0.2A/pt	8 Source 12/24 VDC, 0.2A/pt	6 Relay 24 VDC/240 VAC, 2.0A/pt	8 Relay 24 VDC/240 VAC, 2.0A/pt
LAN	1 × 10/100 Ethernet (RJ45)					-
Serial	1 × RS232, 1 × RS422/485					
SD/MMC Card	1 Slot		-			

<b>DIGITAL I/O MODULE</b>			
Product #	CM3-SP32EDO	CM3-SP32EDT	CM3-SP16EDR
Type	Discrete Input	Discrete Combo	
Input	32 Sink/Source 24 VDC	16 Sink/Source 24 VDC	8 Sink/Source 24 VDC
Output	-	16 Sink 12/24 VDC, 0.2A/pt	8 Relay 24 VDC/240 VAC, 2.0A/pt

<b>PUSH-IN DIGITAL I/O MODULE</b>					
Product #	CM3-SP32EDOP	CM3-SP32EDTP	CM3-SP32EDCP	CM3-SP32EOCP	CM3-SP32EOCP
Type	Discrete Input	Discrete Combo		Discrete Output	
Input	32 Sink/Source 24 VDC	16 Sink/Source 24 VDC	16 Sink/Source 24 VDC	-	
Output	-	16 Sink 12/24 VDC 0.2A/pt	16 Source 12/24 VDC 0.2A/pt	32 Sink 12/24 VDC 0.2A/pt	32 Source 12/24 VDC 0.2A/pt

<b>COMMUNICATION MODULE</b>			
Product #	CM3-SP02ERS	CM3-SP02ERR	CM3-SP01EET
Type	Serial		Ethernet
Interface(s)	1 × RS232 (DB9M) 1 × RS422/485	2 × RS232 (DB9M)	1 × RJ45 100 Mbps
Protocols	CIMON Protocol, User Protocol RTU, Modbus Master/Slave RTU		CIMON Protocol, User Protocol TCP, Modbus Master/Slave TCP

**MINI MODULAR PLC**

**ANALOG I/O MODULE**

Product #	CM3-SP04EAO-A	CM3-SP08EAO-A	CM3-SP04EAA-A	CM3-SP04EOAI	CM3-SP04EOAV
Type	Analog Input		Analog Combo	Analog Output	
Channels	4	8	2 Input/2 Output	4	4
Current	0-20 mA	0-20 mA	0-20 mA I/O	0-20 mA	-
Voltage	±10 V	±10 V	±10 V I/O	-	±10 V
Resolution	14-bit		16-bit	14-bit	
Notes	External 24 VDC Required				

**DIGITAL I/O MODULE**

Product #	CM3-SP32EOT	CM3-SP32EOC	CM3-SP16EOR	CM3-SP32PWM
Type	Discrete Output			Pulse-Width Modulation
Input	-			-
Output	32 Sink 12/24 VDC, 0.2A/pt	32 Source 12/24 VDC, 0.2A/pt	16 Relay 24 VDC/240 VAC, 2.0A/pt	32 Source 12/24 VDC, 0.2A/pt

**RTD & TC MODULE**

Product #	CM3-SP04ERO-A	CM3-SP04ETO-A
Type	RTD	TC
Channels	4	4
Sensor	PT100/JPT100/ PT1000/NI1000	K, J, E, T, B, R, S, and N
Resolution	14-bit	

**SPECIAL MODULE**

Product #	CM3-SP02HSC	CM3-SP02HSD
Type	High-Speed Counter	
Speed	200 kHz	250/500 kHz
Encoder	5/12/24 VDC Source	5/24 V, HTL/RS-422A Line Drive
Notes	TB32M and SCB15M required	

# ETHERCAT Remote I/O



CIMON's EtherCAT Remote I/O solution assists with scalability, flexible network topology, integration, and cost-effectiveness. Increase your discrete and analog I/O count without compromising the application budget or engineering time.

## MINI MODULAR PLC



### SIMPLE

Remove the complication of learning new software or integrating separate CPUs into existing applications.



### COMPATIBILITY

Generate an ESI file from CIMON's CICON software to communicate with any EtherCAT master.



### VERSATILE I/O

Control any CIMON PLC-S discrete or analog module with an EtherCAT master.



### COST EFFECTIVE

Increase profit margins with CIMON's competitive pricing.

REMOTE I/O MODULE	
Product #	CM3-ET10S
Type	EtherCAT Remote I/O
Power	12/24 VDC
LAN	2 × 10/100 Ethernet (RJ45)

TYPE	COMPATIBLE I/O MODULES
Discrete Input	CM3-SP32EDO
Discrete Output	CM3-SP32EOT, CM3-SP32EOC, CM3-SP16EOR
Discrete Combo	CM3-SP32EDT, CM3-SP16EDR
Push-In Discrete	CM3-SP32EDOP
Push-In Discrete	CM3-SP32EOTP, CM3-SP32EOCP
Push-In Discrete	CM3-SP32EDTP, CM3-SP32EDCP
Analog Input	CM3-SP04EAO-A
Analog Output	CM3-SP04EOAI, CM3-SP04EOAV
Analog Combo	CM3-SP04EAA-A
RTD & TC	CM3-SP04ERO-A, CM3-SP04ETO-A



# BRICK PLC MICRO-S



CIMON's CM3 Micro-S brick PLCs are tailored for compact, standalone machine control and remote automation tasks, offering versatile communication and I/O functionalities. They can accommodate up to 36 I/O points and have built-in features, including Ethernet connectivity, high-speed counting (HSC), pulse-train output (PTO) motion control, proportional-integral-derivative (PID), and analog I/O support.

## BRICK-TYPE PLC



### EMBEDDED I/O

Up to 16 discrete inputs, up to 16 discrete outputs, up to 2 analog inputs, and up to 2 analog outputs.  
Ideal for small applications.



### COMPACT

Reduce cost and clutter in applications while offering aesthetic appeal.



### PID

Calibrate any application apparatus to achieve a steady state using calculus-based algorithms.



### HIGH-SPEED COUNTING

Interface with encoders to count pulses at extreme speeds up to 20 kHz.



### INSTALLATION

Capable of DIN rail mounting, offering space optimization, modularity, and enhanced safety.



### CICON SOFTWARE

Complimentary programming software used to program CM1 and CM3 PLCs.



### COMMUNICATION DRIVERS

Supports Modbus RTU/TCP, User Protocol RTU, and CIMON protocol, with built-in Ethernet and serial ports in the CPU for versatile connectivity.



### MOTION CONTROL

Generate speeds up to 100 kHz of pulse train output.



MICRO-S

SB16 SERIES

Product #	CM3-SB16MDTF	CM3-SB16MDCF
Power	12/24 VDC, Non-expandable	
Discrete Input	8 Sink/Source, 12/24 VDC	
Discrete Output	8 Sink, 12/24 VDC, 0.2A/pt	8 Source, 12/24 VDC, 0.2A/pt
LAN	1 × 10/100 Ethernet (RJ45)	
Serial	1 × RS232, 1 × RS422/485	



## BRICK-TYPE PLC

### SB32 SERIES

Product #	CM3-SB32MDTF	CM3-SB32MDCF	CM3-SB32MDRF
Power	12/24 VDC, Non-expandable		
Discrete Input	16 Sink/Source, 12/24 VDC		
Discrete Output	16 Sink, 12/24 VDC, 0.2A/pt	16 Source, 12/24 VDC, 0.2A/pt	16 Relay, 24 VDC/240 VAC, 2.0A/pt
Analog Input	2 × Point, 0–10V, 0–20mA		
Analog Output	2 × Point, 0–10V, 4–20mA		
LAN	1 × 10/100 Ethernet (RJ45)		
Serial	1 × RS232, 1 × RS422/485		

