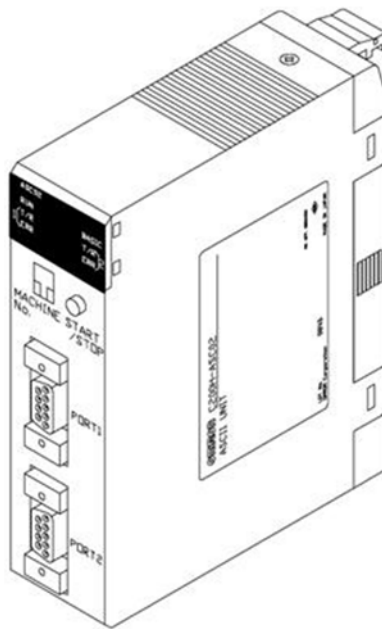# C200H-ASC02

OMRON

SYSMAC - System C200H Special I/O Modules – ASCII/BASIC Module

Presented by - MRO Electric and Supply Company, Inc.

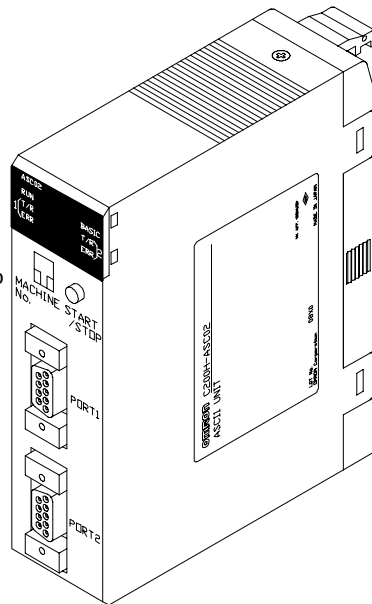*For Product Needs:*

Email: sales@MROELECTRIC.COM

Call: **1-800-691-8511**   *Fax:* **919-415-1614**

http://www.MROELECTRIC.com/

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Two RS-232C ports
Bidirectional serial interface to
- Computers
- Printers
- Bar code readers
- PLCs
- Other ASCII devices

C200H-ASC02

General Information
The ASCII/BASIC Module provides a 24-Kbyte programmable coprocessor module that operates independently of the PLC. Two built-in RS-232C ports provide easy interface to a variety of external devices including other manufacturers' PLCs, computer terminals, operator stations, bar code readers, and any other device utilizing a serial interface. The module is programmable in either BASIC or Assembly providing a platform for complex calculations and algorithms at the PLC level. This includes PID, gas flow calculations and complex math and string manipulation functions. Communications can be initiated by either the module or the PLC.
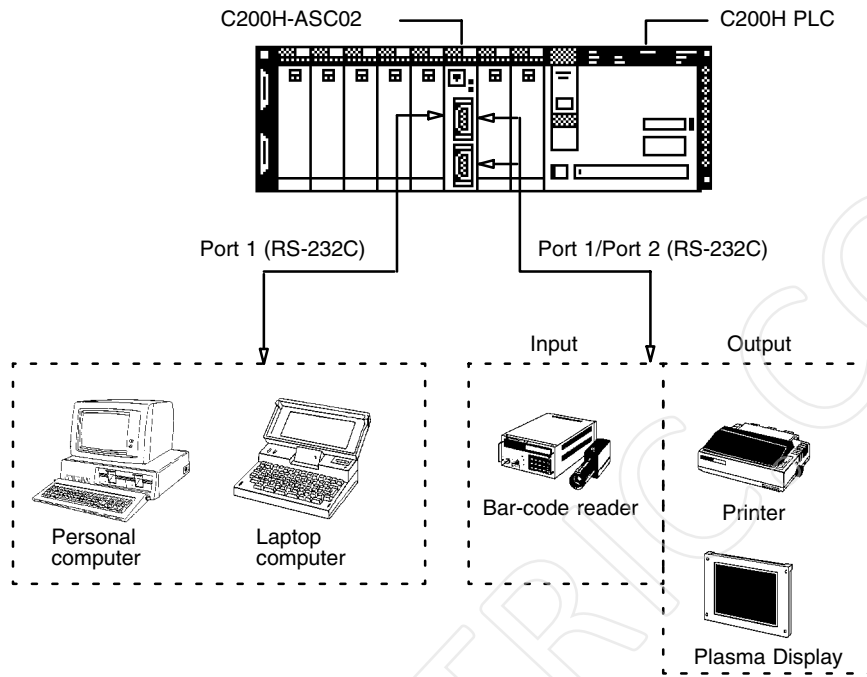
Features
♦ 24-Kb, battery-backed RAM and 24-Kb EEPROM programmable in BASIC or Assembly languages

♦ Special commands to initiate communication with the PLC

♦ Two RS-232C ports, 19,200 baud maximum speed

♦ Built-in clock/calendar including year, month, day, date, hour, minute, second (accurate to 30 seconds/year)

Specifications

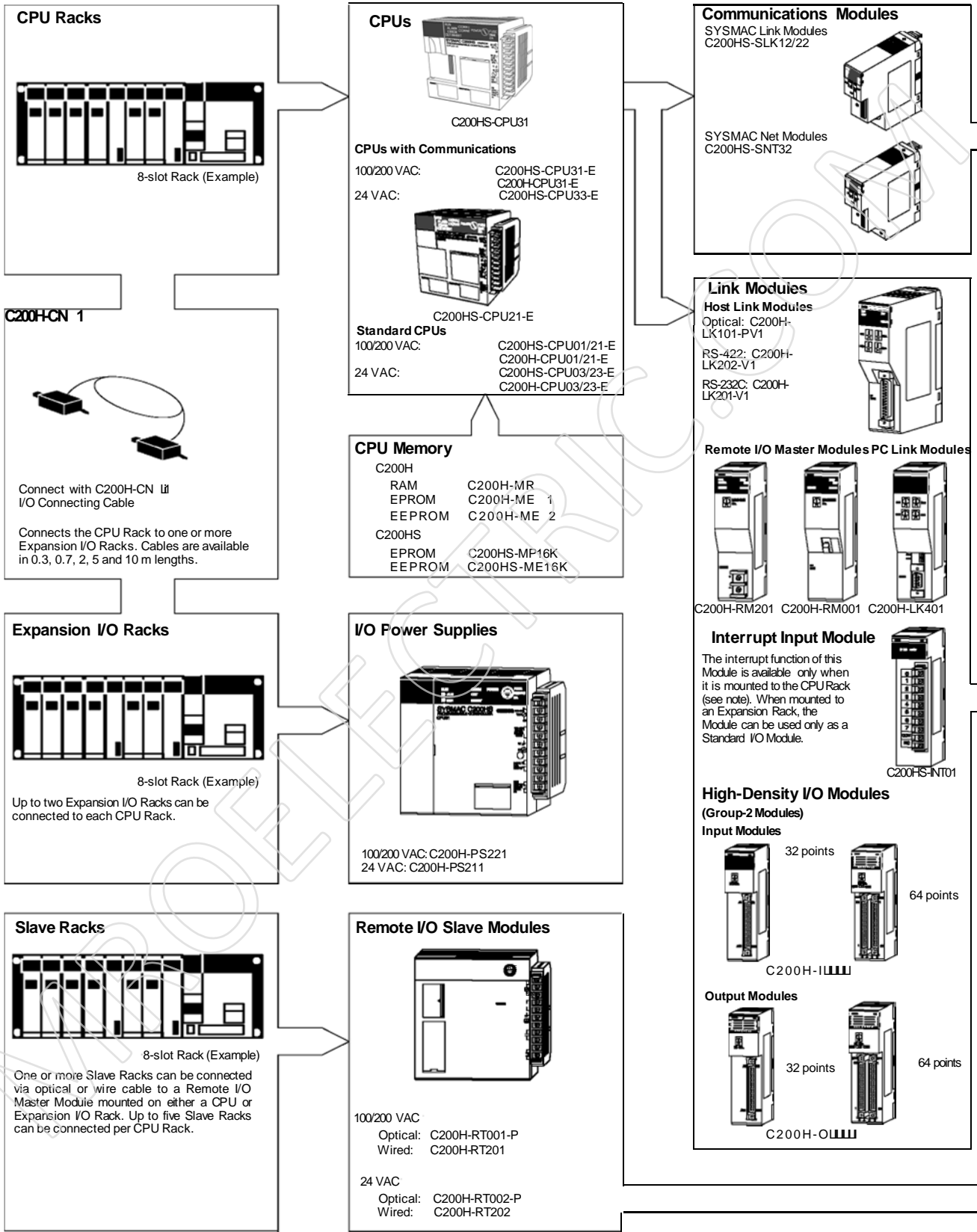| Name	Description	Part number
ASCII/BASIC Module Utility Software	For AT-compatible computers; enables program development, downloading uploading, etc.	SYSMATE-ASC91-V1
Programming Cable	C200H-ASC02 to computer (9-pin RS-232)	C200H-CN229-EU
	C200H-ASC02 to computer (25-pin RS-232)	C200H-CN220-EU

Specifications

Part number	C200H-ASC02
Communication mode	Half duplex
Synchronization	Start-stop
Baud rate	Port 1: 300/600/1200/2400/4800/9600 bps Port 2: 300/600/1200/2400/4800/9600/19,200 bps (switch selectable)
Transmission mode	Point-to-point
Transmission distance	15 m (49 ft) max.
Interface	Conforms to RS-232C. Two ports (D-sub 9-pin connectors)
Memory capacity	24 Kbytes RAM battery backup) 24 Kbytes EEPROM for program storage Multiple program storage capability
Transfer capacity	255 words at a maximum of 20 words per scan
Transfer method	Write/read data exchange I/O data exchange
Clock/calendar	Year, month, day, date, hour, minute, second Programmable leap year Accuracy: month +30 seconds/month at 25°C (77°F)
Diagnostic functions	CPU watchdog timer, battery voltage drop
Battery life	5 years at 25°C (77°F). Battery life is shortened if ASCII Module is used at higher temperatures.
EEPROM	Guaranteed lifetime of 5000 saves
Manual	PLC Module: W165 The manual is included with the software.

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C200H-ASC02 — C200H PLC

Port 1 (RS-232C) Port 1/Port 2 (RS-232C)

Input Output

Bar-code reader Printer

Personal computer Laptop computer

Plasma Display

System Configuration

CPU Racks

8-slot Rack (Example)

C200H-CN□1□

Connect with C200H-CN□1□
I/O Connecting Cable

Connects the CPU Rack to one or more
Expansion I/O Racks. Cables are available
in 0.3, 0.7, 2, 5 and 10 m lengths.

Expansion I/O Racks

8-slot Rack (Example)

Up to two Expansion I/O Racks can be
connected to each CPU Rack.

Slave Racks

8-slot Rack (Example)

One or more Slave Racks can be connected
via optical or wire cable to a Remote I/O
Master Module mounted on either a CPU or
Expansion I/O Rack. Up to five Slave Racks
can be connected per CPU Rack.

CPUs

C200HS-CPU31

CPUs with Communications
100/200 VAC:	C200HS-CPU31-E
	C200H-CPU31-E
24 VAC:	C200HS-CPU33-E

C200HS-CPU21-E

Standard CPUs
100/200 VAC:	C200HS-CPU01/21-E
	C200H-CPU01/21-E
24 VAC:	C200HS-CPU03/23-E
	C200H-CPU03/23-E

CPU Memory

C200H
RAM	C200H-MR□□□
EPROM	C200H-ME□□1
EEPROM	C200H-ME□□2

C200HS
EPROM	C200HS-MP16K
EEPROM	C200HS-ME16K

I/O Power Supplies

100/200 VAC: C200H-PS221
24 VAC: C200H-PS211

Remote I/O Slave Modules

100/200 VAC
Optical:	C200H-RT001-P
Wired:	C200H-RT201

24 VAC
Optical:	C200H-RT002-P
Wired:	C200H-RT202

Communications Modules

SYSMAC Link Modules
C200HS-SLK12/22

SYSMAC Net Modules
C200HS-SNT32

Link Modules

Host Link Modules
Optical: C200H-LK101-PV1

RS-422: C200H-LK202-V1

RS-232C: C200H-LK201-V1

Remote I/O Master Modules   PC Link Modules

C200H-RM201   C200H-RM001   C200H-LK401

Interrupt Input Module

The interrupt function of this
Module is available only when
it is mounted to the CPU Rack
(see note). When mounted to
an Expansion Rack, the
Module can be used only as a
Standard I/O Module.

C200HS-INT01

High-Density I/O Modules
(Group-2 Modules)
Input Modules

32 points

64 points

C200H-ID□□□□

Output Modules

32 points

64 points

C200H-O□□□□□

Note: Only one Interrupt Input Module can be used with a CPU.

System Configuration
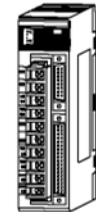
Special I/O Modules

Analog Input Modules
C200H-AD001/002

Analog Output Modules
C200H-DA001
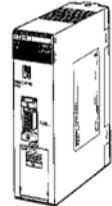
Temperature Sensor Modules
C200H-TS□□□

Temperature Control Modules
C200H-TC□□□
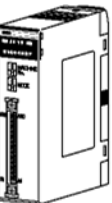
Fuzzy Logic Module
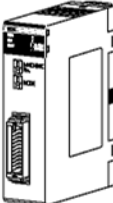C200H-FZ001

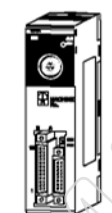### PID Control Modules
C200H-PID□□

High Speed Counter Modules
C200H-CT□□□

Position Control Modules
C200H-NC□□□

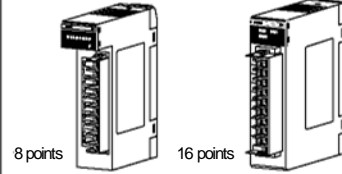### Cam Position Modules
C200H-CP114

ID Sensor Module
C200H-IDS□□

ASCII Module
C200H-ASC02
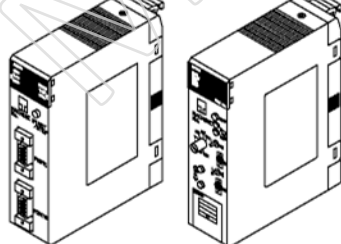
Voice Module
C200H-OV001

I/O Modules

Input Modules (C200H-I□□□□)
8 points   16 points

(AC, DC, AC/DC, transistor inputs)
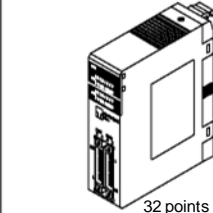
32 points
(Treated as Special I/O Module)

Output Modules (C200H-O□□□□)
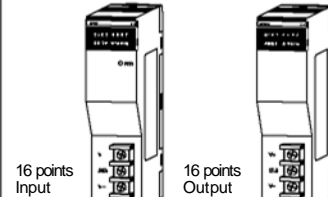5 points
8 points   12 points
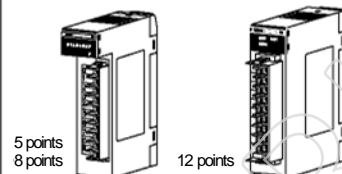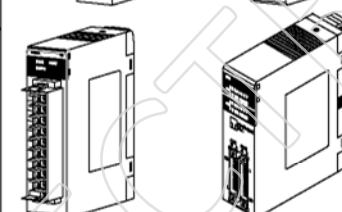
16 points 32 points
(Treated as Special I/O Module)

DC Input/Transistor Output Modules
C200H-MD□□□
(16 inputs and 16 outputs; treated as Special I/O Module.)
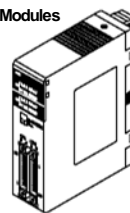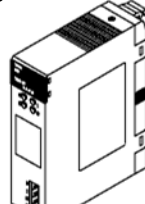
B7A Interface Modules
16 points Input   16 points Output
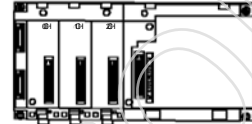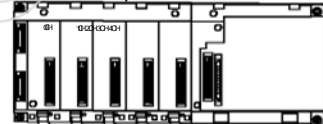C200H-B7AI1 C200H-B7AO1

Analog Timer Module
C200H-TM001

Backplanes
The same Backplanes are used for CPU, Expansion I/O, and Slave Packs.

3-slot Backplane
C200H-BC031-V2

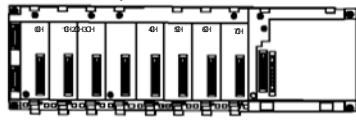### 5-slot Backplane
C200H-BC051-V2

8-slot Backplane
C200H-BC081-V2

10-slot Backplane
C200H-BC101-V2