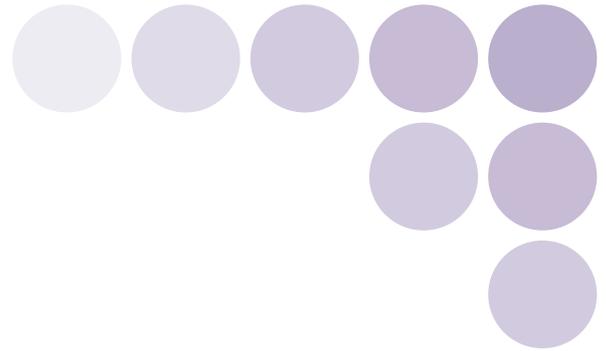**+New** Product News

OMRON

Open Network for High-Speed Control

CompoNet

- **CompoNet Master Unit**
  CS1W-CRM21/CJ1W-CRM21
- **CompoNet Slave Unit**
  CRT1 Series
- **CompoNet Repeater Unit**
  CRS1 Series

Fast and Intelligent

CompoNet™

realizing

New Lineup

Unconventional!
Super thin!

- Thinnest slaves in the industry.
- Fit in small spaces in panels or devices.
- Attachable with DIN Track or screws.

Actual Size

CRT1 REMOTE TERMINAL — OMRON — IN — NS MS

15 mm

New

CompoNet Digital I/O
Slaves 16 points with MIL
Connector

- **CRT1-VID16ML/VOD16ML(-1)**

RUN | STOP RESET | ○ Hz ○ RUN ○ PRG | MIN MAX

Wide selection of CompoNet slaves.

A new global standard for smarter control networking

What is
CompoNet?

Ethernet
Internet layer

Controller Link
Controller layer

DeviceNet
Device layer

CompoNet
Sensor & Actuator layer
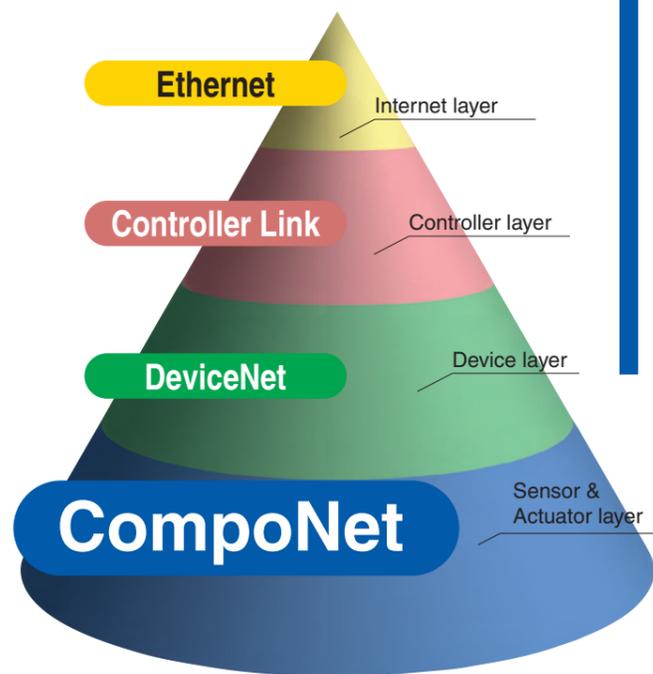
By combining OMRON's application experience with proven CIP communications technology, CompoNet provides an efficient networking solution for smart sensors, actuators and remote I/O. Fast I/O data exchange and easy setup are combined with transparent messaging for access to intelligent field devices.

Seamless CIP messaging through multiple layers of networks means you can access intelligent field devices from anywhere in your control system, and without having to program communications code in your controller.

Using CompoNet as the control network shortens your development time, reduces wiring, and simplifies troubleshooting and machine maintenance.
All to help you build the best machines in less time.

What is CIP?

CIP (Common Industrial Protocol) was developed as a communications protocol for industrial applications. Initially used in DeviceNet on CAN networks, it is now an open standard operating on several different physical layers.

The main advantage of CIP is its seamless data transfer between different layers of CIP networks. Whether transferring cyclic I/O data, configuration settings or downloading control programs, you will not have to worry which device is connected where.

Therefore you can freely choose the best CIP network for each part of your system, and mix them any way you want.

Global Open Network

CompoNet

CompoNet is an ODVA network

The CIP communications standard, as used in the EtherNet/IP™, DeviceNet™ and CompoNet™ networks, is controlled by the ODVA, the Open DeviceNet Vendors Association. With nearly 300 member companies worldwide developing a wide variety of products, the ODVA promotes the advantages of seamless networking, and makes sure that products adhere to the standard for easy interconnection between vendors. OMRON, as one of the four founding members of the ODVA, plays a leading role in developing future technologies for industrial networking.

Note: CompoNet and DeviceNet are registered trademarks of the ODVA.
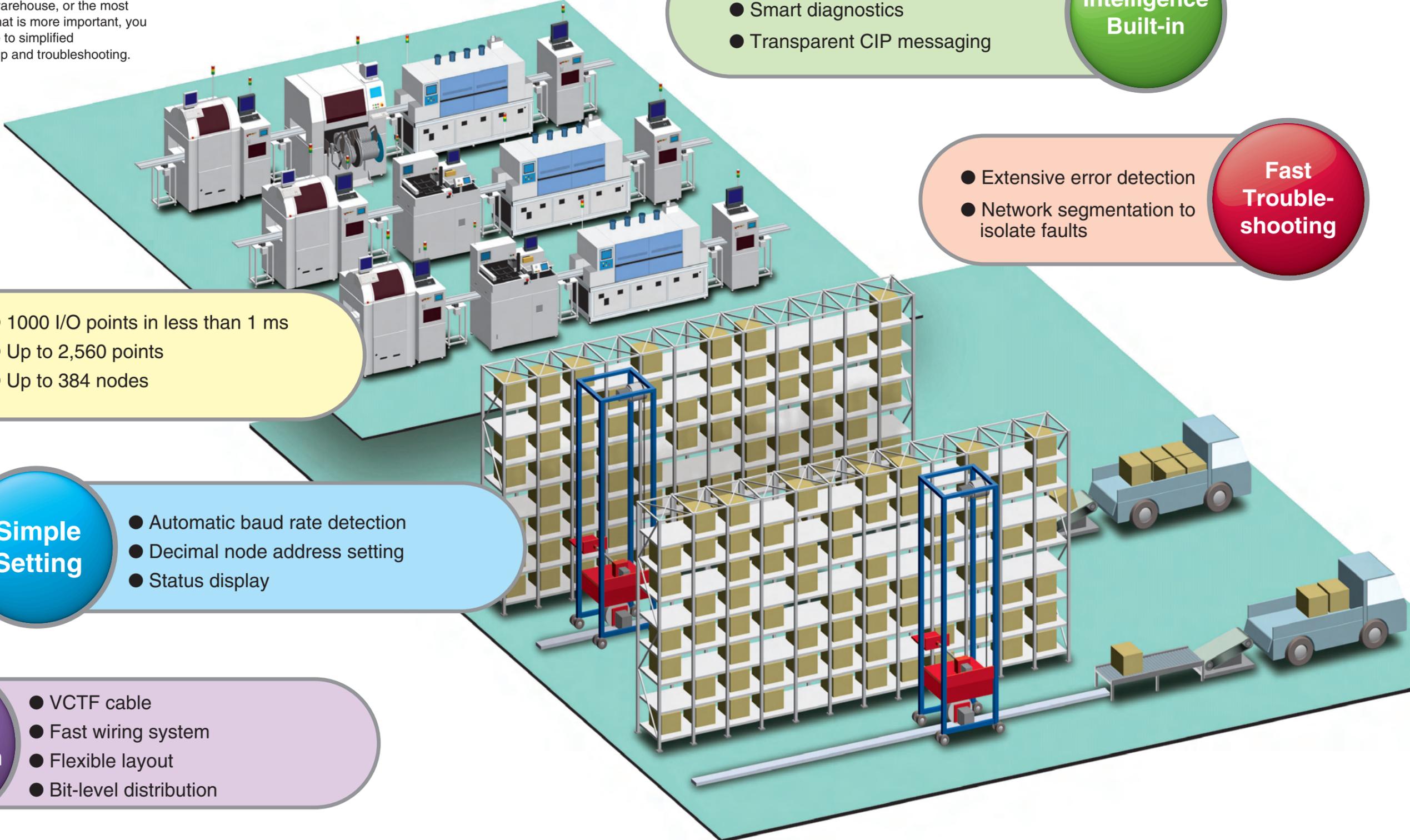
ODVA Website:http://www.odva.org/

Open Network
- Global Standard
- Easy Interconnection

INDEX

CompoNet - Achieve more with less effort.

Conventional networks are either fast, but simple limited-capacity buses for control, or complex information-exchange systems for configuration and monitoring. CompoNet, however, offers the ideal mix of high speed, ample capacity, and ease-of-use needed to let you build the best machine, the smartest warehouse, or the most flexible conveyor system. And what is more important, you can achieve this in less time, due to simplified programming, wiring, device setup and troubleshooting.

Intelligence Built-in
- Preventive maintenance data
- Smart diagnostics
- Transparent CIP messaging

Fast Trouble-shooting
- Extensive error detection
- Network segmentation to isolate faults

High Performance
- 1000 I/O points in less than 1 ms
- Up to 2,560 points
- Up to 384 nodes

Simple Setting
- Automatic baud rate detection
- Decimal node address setting
- Status display

Easy Installation
- VCTF cable
- Fast wiring system
- Flexible layout
- Bit-level distribution

CompoNet enhances machine performance!

● In electronic parts production, every millisecond counts

High Performance, Large Capacity

Splitting production machines into logical modules allows easy customization to meet specific end-user demands.

To keep high performance, a fast and easy-to-extend network is required. The efficiency of CompoNet delivers fast cycle times, even when extending the network with repeaters.

Conventional general-purpose field network

10-100 ms

CompoNet

1 ms

● Each Master Unit can control up to 2,560 I/O points in up to 384 nodes.

Master Unit CS1W-CRM21
Master Unit CJ1W-CRM21

- 64 word input nodes (1,024 points)
- 64 word output nodes (1,024 points)
- 128 bit input nodes (256 points)
- 128 bit output nodes (256 points)

Simple Setting

CompoNet is up and running in minutes. Set the master's mode and baud rate, and the address on each slave. Then plug in and go; no software settings required.

● Communications status on Master Unit display

Reduce setting mistakes

Slaves adjust to the Master's baud rate

Only address setting required.

With CompoNet

Easy decimal setting!

Master Unit CS1W-CRM21
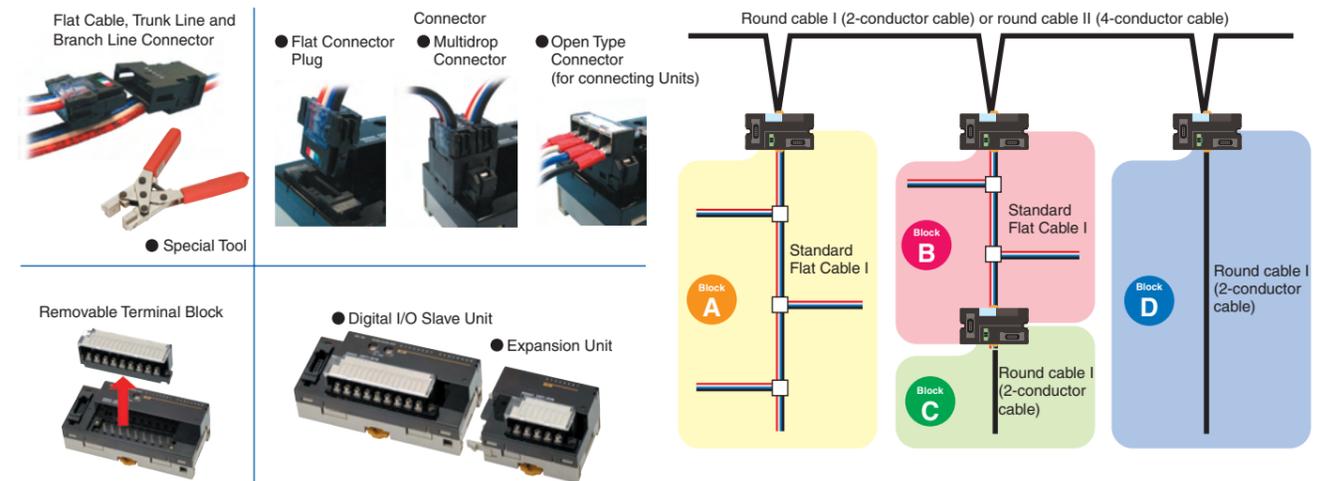
Master Unit CJ1W-CRM21

Easy Installation

CompoNet flat cable and isolation-displacement connectors make installation fast and faultless. Power and communications are combined in one cable.
Branch connectors allow you to easily add or remove devices for maintenance and troubleshooting.
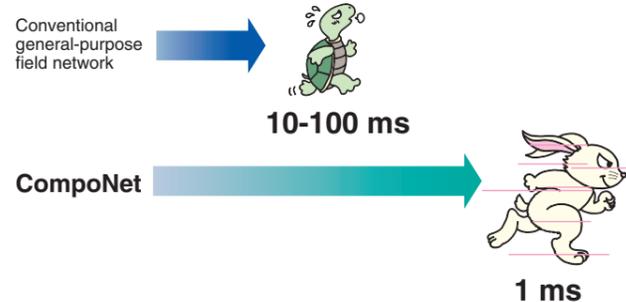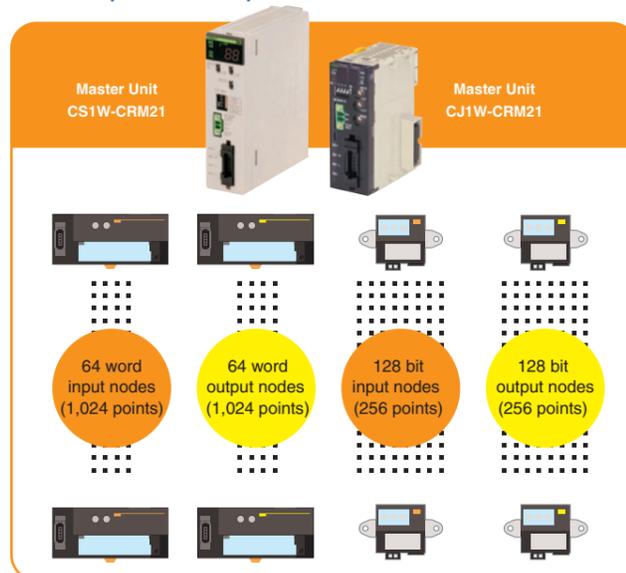Repeater Units can link sections of different cable types, allowing mixed topology networks.

● Alternatively, you can use simple twisted-pair cable and power each node individually.

Flat Cable, Trunk Line and Branch Line Connector

Connector
● Flat Connector Plug
● Multidrop Connector
● Open Type Connector (for connecting Units)

Round cable I (2-conductor cable) or round cable II (4-conductor cable)

● Special Tool

Removable Terminal Block

● Digital I/O Slave Unit

● Expansion Unit

Block A — Standard Flat Cable I

Block B — Standard Flat Cable I

Block C — Round cable I (2-conductor cable)

Block D — Round cable I (2-conductor cable)

CompoNet helps you decrease engineering!

●In warehouse automation, efficient wiring saves cost

Flexible Installation

● Using CompoNet flat cable and repeaters allows easy extensions and changes in network layout.
By using repeaters, long branch lines can cover a wide area with less cable.

Easy extension

CRS1-RPT01

Long branch line
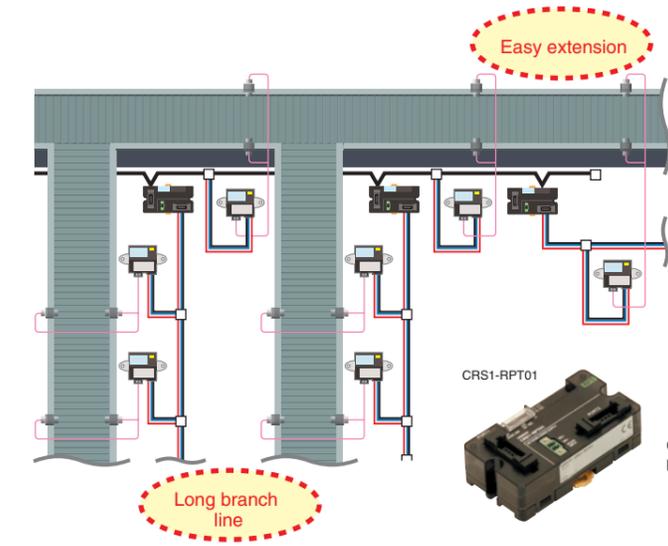
Bit-level Distribution

● Mount them wherever you need them.
Conveyor lines require just one or two I/O points every few meters. Dust- and splash-proof IP54 bit slaves allow efficient installation with reduced cabling, directly on the line.

CompoNet Master Unit

CompoNet

Round cable I (2-conductor cable)

Bit Slave Units

Repeater Unit

Sheathed Flat Cable II

Communications power supply
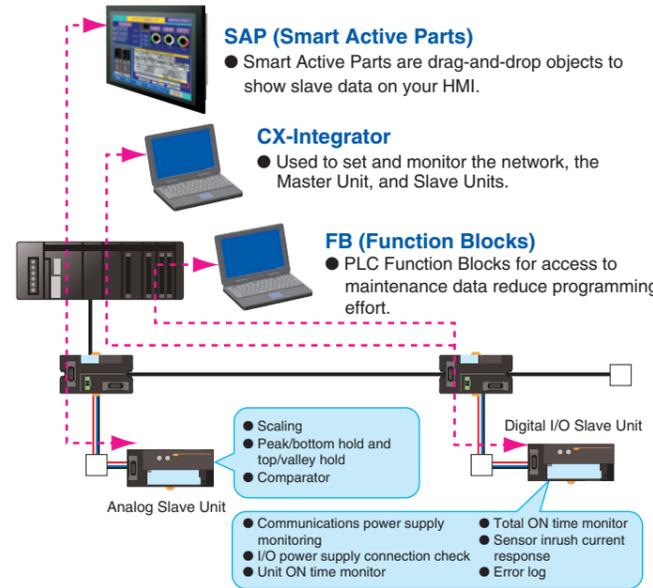
Relay box

Bit-by-bit distribution

Intelligence Built-in

All CompoNet slaves contain early-warning systems that monitor system performance continuously. The transparent CIP communications of CompoNet makes it easy to access the diagnostic data in each device.
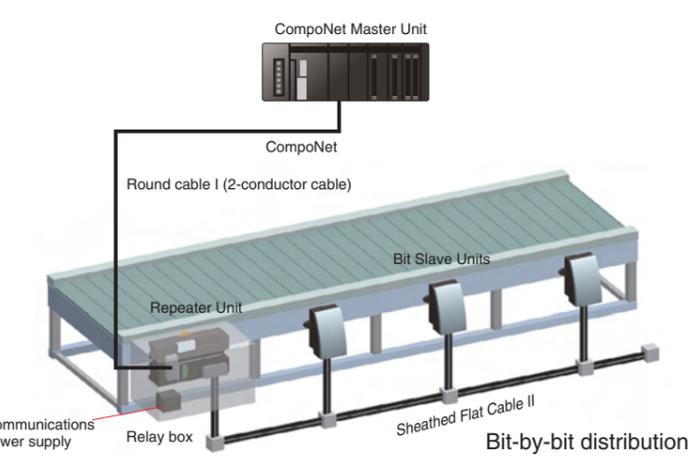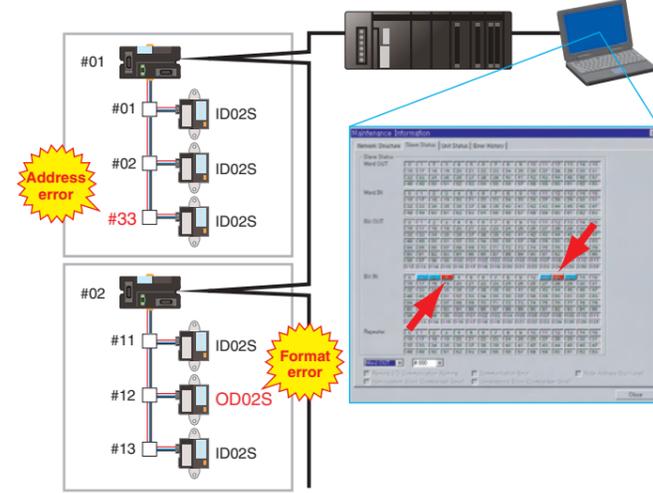
■ Smart Features

● Set limit values in each slave to detect reduced machine performance before breakdown.

SAP (Smart Active Parts)
● Smart Active Parts are drag-and-drop objects to show slave data on your HMI.

CX-Integrator
● Used to set and monitor the network, the Master Unit, and Slave Units.

FB (Function Blocks)
● PLC Function Blocks for access to maintenance data reduce programming effort.

As time passes . . .

Threshold

1 s

2 s

The cylinder is slipping!

● Scaling
● Peak/bottom hold and top/valley hold
● Comparator

Analog Slave Unit

Digital I/O Slave Unit

● Communications power supply monitoring
● I/O power supply connection check
● Unit ON time monitor
● Total ON time monitor
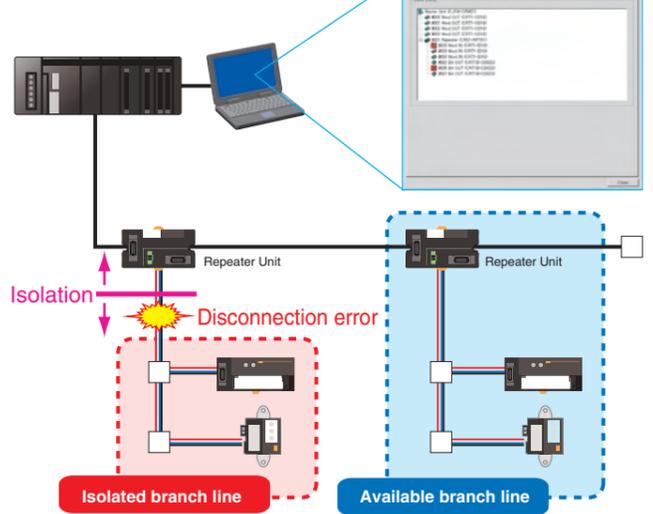● Sensor inrush current response
● Error log

Fast Troubleshooting

Indication on the Master Unit helps to quickly assess the network status.
The CX-Integrator helps you identify wiring errors, power failures or malfunction.
By creating network segments separated by repeaters, faults can be isolated to reduce the impact on overall operation.

■ Extensive Error Detection

#01
#01 ID02S
#02 ID02S
#33 ID02S

Address error

#02
#11 ID02S
#12 OD02S
#13 ID02S

Format error

■ Network Isolation

Repeater Unit

Isolation

Disconnection error

Repeater Unit

Isolated branch line

Available branch line

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AUDIN - 8, avenue de la malle - 51370 Saint Brice Courcelles - Tel : 03.26.04.20.21 - Fax : 03.26.04.28.20 - Web : http: www.audin.fr - Email : info@audin.fr

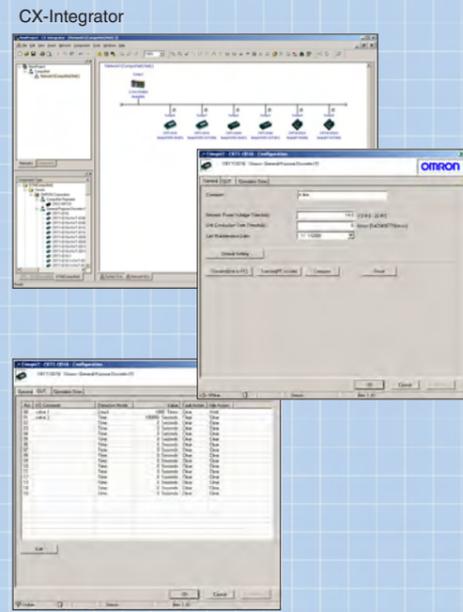# The open CompoNet system is prepared for the future.

Supported by the members of the ODVA worldwide, CompoNet allows you to select the best devices for your application.
OMRON's technology and the ODVA's certification will assure plug-and-play operation between devices from different vendors.
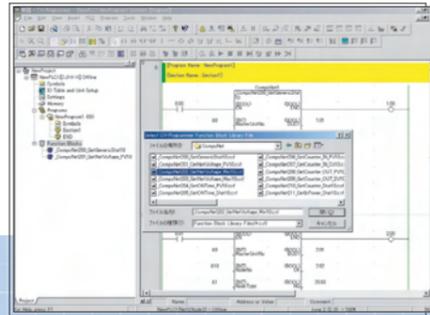
Function Block Library
The function block library is a collection of functional objects for Programmable Controllers (PLCs).
The function blocks provided by OMRON can be incorporated into user programming to reduce design work and increase standardization and quality of control device interfaces.

Smart Active Parts Library
The SAP library is a collection of screen parts for Programmable Terminals. The parts provided by OMRON can be incorporated into user-created screens to reduce design work and increase standardization and quality for control device interfaces.
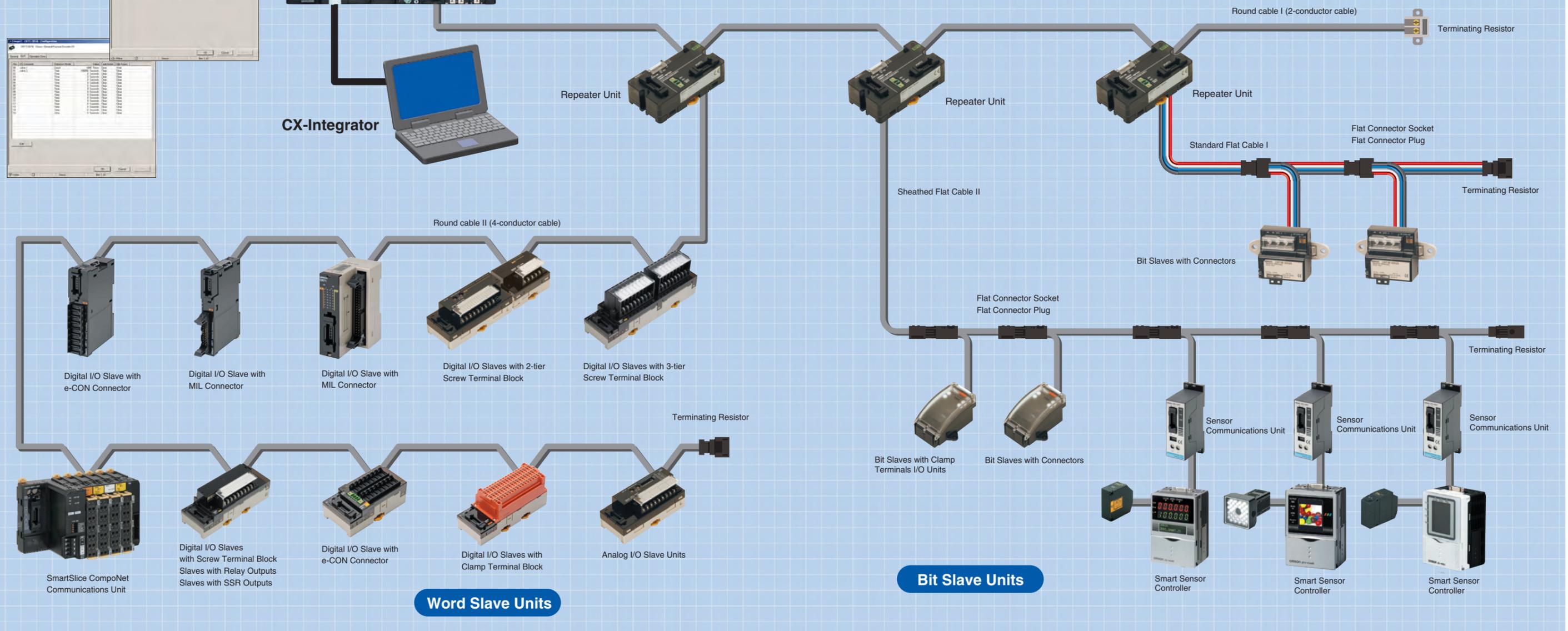SAP (Smart Active Parts)
http://www.omron.com/

CX-Integrator

CompoNet Slave Monitor

The CompoNet Family
Various device manufactures are planning for CompoNet products.
Page 20 to 22

SYSMAC CS/CJ Series
CP1H (CJ Unit Adaptor, CP1W-EXT01, enables using the CJ1W-CRM21 with CP1H.)
CompoNet Master Units

NS-series Programmable Terminal

CX-Integrator

Repeater Unit

Repeater Unit

Repeater Unit

Round cable I (2-conductor cable)

Terminating Resistor

Flat Connector Socket
Flat Connector Plug

Standard Flat Cable I

Sheathed Flat Cable II

Terminating Resistor

Round cable II (4-conductor cable)

Bit Slaves with Connectors

Flat Connector Socket
Flat Connector Plug

Digital I/O Slave with e-CON Connector

Digital I/O Slave with MIL Connector

Digital I/O Slave with MIL Connector

Digital I/O Slaves with 2-tier Screw Terminal Block

Digital I/O Slaves with 3-tier Screw Terminal Block

Terminating Resistor

Terminating Resistor

Bit Slaves with Clamp Terminals I/O Units

Bit Slaves with Connectors

Sensor Communications Unit

Sensor Communications Unit

Sensor Communications Unit

SmartSlice CompoNet Communications Unit

Digital I/O Slaves with Screw Terminal Block
Slaves with Relay Outputs
Slaves with SSR Outputs

Digital I/O Slave with e-CON Connector

Digital I/O Slaves with Clamp Terminal Block

Analog I/O Slave Units

Word Slave Units

Bit Slave Units

Smart Sensor Controller

Smart Sensor Controller

Smart Sensor Controller

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CompoNet Network Specifications

Cable Types, Baud Rates, and Maximum Distances

This section provides specifications on the maximum cable length and maximum number of nodes for each type of cable.
Do not exceed these specifications.
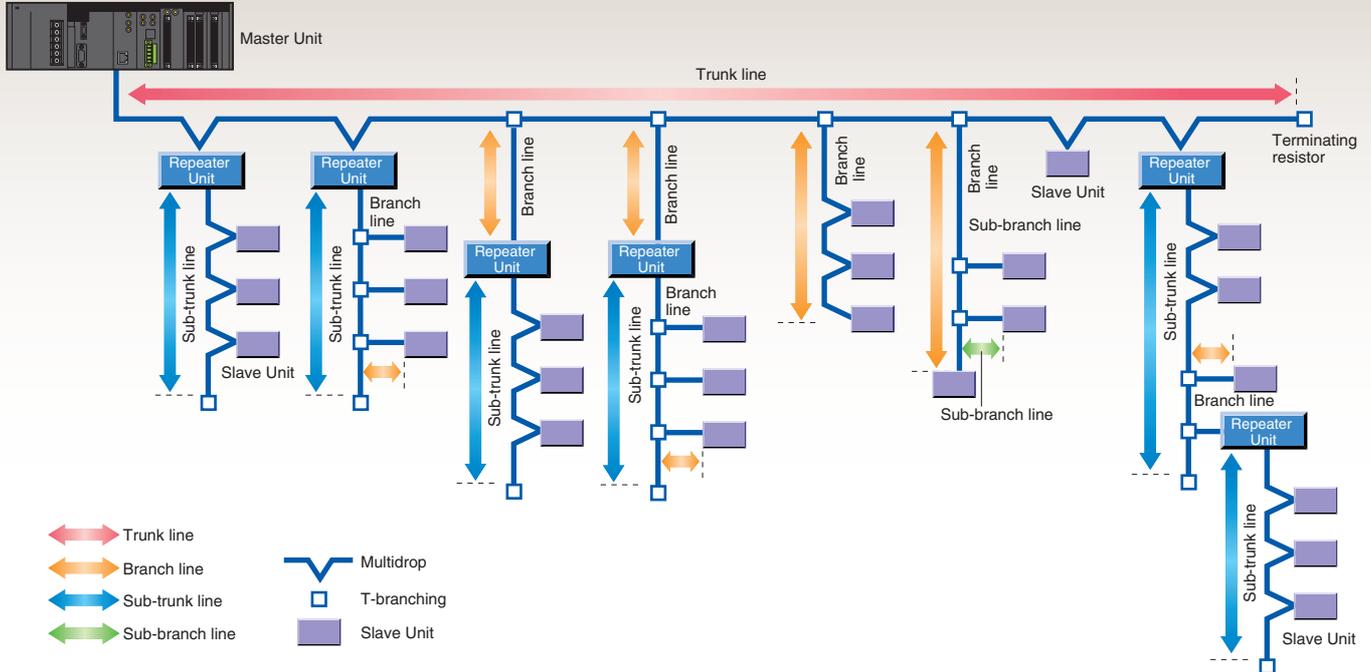
■ Restrictions (at Baud Rate of 4 Mbits/s (No Branch Lines))

Cable type	Maximum length per segment (maximum length with Repeater Units)	Branch line length per segment	Total branch line length per segment	Branch location restrictions	Maximum number of Slave Units per segment (See note 2.)
Round cable I	30 m (90 m)	0 m (See note 1.)	0 m (See note 1.)	---	32 nodes
Flat cable I, flat cable II, and round cable II	30 m (90 m)	0 m (See note 1.)	0 m (See note 1.)	---	32 nodes

Note 1: T-branches cannot be connected (only multidrop connections are possible).
2: Number of nodes including Repeater Units

■ Restrictions (at Baud Rate of 3 Mbits/s)

Cable type	Maximum length per segment (maximum length with Repeater Units)	Branch line length per segment	Total branch line length per segment	Branch location restrictions	Maximum number of nodes per branch (See note 1.)	Sub-branch line length per segment	Total sub-branch line length per segment	Maximum number of Slave Units per segment (See note 2.)
Round cable I	30 m (90 m)	0.5 m	8 m	3 branches/m	1 node	0 m	0 m	32 nodes
Flat cable I, flat cable II, and round cable II	30 m (90 m)	0.5 m	8 m	3 branches/m	1 node	0 m	0 m	32 nodes

Note 1: The maximum number of nodes per branch is the maximum number of Slave Units or Repeater Units that can be connected to one branch line using multidrop or T-branch connections (sub-branches).
2: Number of nodes including Repeater Units

■ Restrictions (at Baud Rate of 1.5 Mbits/s)

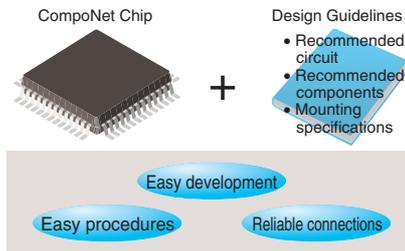| Cable type		Maximum length per segment (maximum length with Repeater Units)	Branch line length per segment	Total branch line length per segment	Branch location restrictions	Maximum number of nodes per branch (See note 1.)	Sub-branch line length per segment	Total sub-branch line length per segment	Maximum number of Slave Units per segment (See note 2.)
Round cable I	Without branches	100 m (300 m)	0 m (See note 3.)	0 m (See note 3.)	---	---	---	---	32 nodes
	With branches	30 m (90 m)	2.5 m	25 m	3 branches/m	3 nodes	0 m	0 m	32 nodes
Flat cable I, flat cable II, and round cable II		30 m (90 m)	2.5 m	25 m	3 branches/m	3 nodes	0.1 m (See note 4.)	2 m (See note 4.)	32 nodes

Note 1: The maximum number of nodes per branch is the maximum number of Slave Units or Repeater Units that can be connected to one branch line using multidrop or T-branch connections (sub-branches).
2: Number of nodes including Repeater Units
3: T-branches cannot be connected (only multidrop connections are possible).
4: T-branch connections from sub-branch lines.

■ Restrictions (at Baud Rate of 93.75 kbits/s)

Cable type	Maximum length per segment (maximum length with Repeater Units)	Branch line length per segment	Total branch line length per segment	Branch location restrictions	Maximum number of nodes per branch (See note 1.)	Sub-branch line length per segment	Total sub-branch line length per segment	Maximum number of Slave Units per segment (See note 2.)
Round cable I	500 m (1500 m)	6 m	120 m	3 branches/m	1 node	---	---	32 nodes
Flat cable I, flat cable II, and round cable II	No restrictions to a total length per segment of 200 m							32 nodes

Note 1: The maximum number of nodes per branch is the maximum number of Slave Units or Repeater Units that can be connected to one branch line using multidrop or T-branch connections (sub-branches).
2: Number of nodes including Repeater Units

CompoNet Open-network Information

OMRON actively promotes open networks.

OMRON sells CompoNet-compatible ASICs and MPUs while providing development support with a specialized team.
Adopting this open network effectively reduces development costs and shortens development time by simplifying the development of CompoNet devices. The following two types of CompoNet slaves are available to match the characteristics of the device to be developed.

CompoNet Chip

Design Guidelines
- Recommended circuit
- Recommended components
- Mounting specifications

Easy development

Easy procedures   Reliable connections

Bit Slave Units	Thirty-two or fewer I/O For bit-level ON/OFF control I/O port interface	
Word Slave Units	Interface for 256 points User-set messages can be sent and received. DPRAM I/F	
Masters	Communications for 1,280 inputs and 1,280 outputs User-set messages can be sent and received. DPRAM I/F	

Refer to the following for inquiries regarding open networks.

Technology Development Center Headquarters, Integration Strategy & Business Development Center,
  Telephone: +81-77-565-5315, Email: open_integration@omron.co.jp

The latest information is available on the following site.

  http://www.omron.com/

From the home page, select *Products Index - FA System Devices - Open Technology*

● Range of Open Technology

CompoNet Master Unit

CompoNet

Slave Configuration

Bit Slave

Physical layer

Communications ASIC

Communications MPU

Bit signal

User circuit
(2 to 16 I/O points)

Word Slave

Physical layer

Communications ASIC

Communications MPU   DPRAM

Master Configuration

AB, DB

User MPU (0 to 32 bytes I/O + messages)

DPRAM

Master ASIC

Master MPU

Physical layer

16 inputs   16 outputs   2 inputs   2 outputs

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CompoNet

Product Introductions

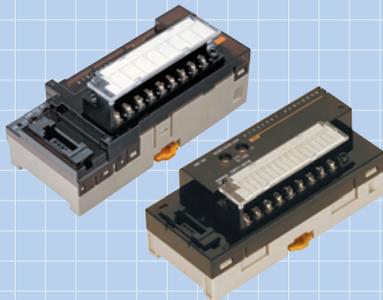## Master Units

■ Master Units

CJ Series
CJ1W-CRM21

CS Series
CS1W-CRM21

Word Slaves

Digital I/O Slaves

■ Two-tire Screw
Terminal Block
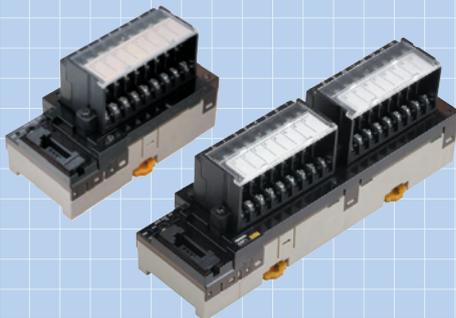
● Input Units
CRT1-ID08(-1) *NEW*
CRT1-ID16(-1)
● Output Units
CRT1-OD08(-1) *NEW*
CRT1-OD16(-1)
● I/O Units
CRT1-MD16(-1) *NEW*

■ Screw Terminal Block
and Relay Outputs or
SSR Outputs

● Relay Outputs
CRT1-ROS08 *NEW*
CRT1-ROS16
● SSR Outputs
CRT1-ROF08 *NEW*
CRT1-ROF16

■ Three-tier Screw
Terminal Block

● Input Units
CRT1-ID08TA(-1) *NEW*
CRT1-ID08TAH(-1) *NEW*
CRT1-ID16TA(-1)
CRT1-ID16TAH(-1) *NEW*
● Output Units
CRT1-OD08TA(-1) *NEW*
CRT1-OD08TAH(-1) *NEW*
CRT1-OD16TA(-1)
CRT1-OD16TAH(-1) *NEW*

● I/O Units
CRT1-MD16TA(-1)
CRT1-MD16TAH(-1) *NEW*

Analog I/O Slaves
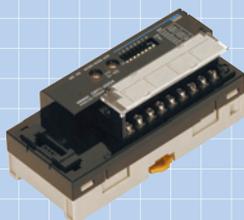
■ Analog Input Unit
CRT1-AD04
■ Analog Output Unit
CRT1-DA02

Expansion Units

■ Input Units
XWT-ID08(-1)
XWT-ID16(-1)
■ Output Units
XWT-OD08(-1)
XWT-OD16(-1)

Word Slaves

Digital I/O Slaves

■ Vertical Slaves with e-CON Connectors

CRT1-VID08S(-1) *NEW*
CRT1-VOD08S(-1) *NEW*

■ Vertical Slaves with MIL Connectors

CRT1-VID16ML(-1) *NEW*
CRT1-VOD16ML(-1) *NEW*

CRT1-VID32ML(-1) *NEW*
CRT1-VOD32ML(-1) *NEW*
CRT1-VMD32ML(-1) *NEW*

■ Horizontal Slaves with e-CON Connectors

● Input Units
CRT1-ID16S(-1)
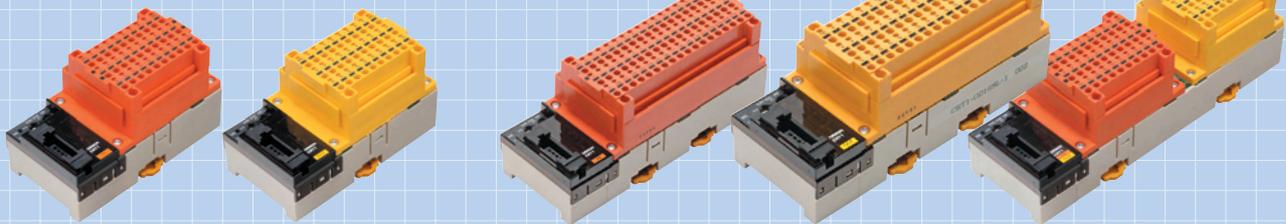CRT1-ID16SH(-1) *NEW*
CRT1-ID32S(-1) *NEW*
CRT1-ID32SH(-1) *NEW*
● Output Units
CRT1-OD16S(-1)
CRT1-OD16SH(-1) *NEW*
CRT1-OD32S(-1) *NEW*
CRT1-OD32SH(-1) *NEW*

● I/O Units
CRT1-MD16S(-1)
CRT1-MD16SH(-1) *NEW*
CRT1-MD32S(-1) *NEW*
CRT1-MD32SH(-1) *NEW*

■ Horizontal Slaves with Clamp Terminal Blocks

CRT1-ID08SL(-1) *NEW*
CRT1-OD08SL(-1) *NEW*

CRT1-ID16SL(-1)
CRT1-OD16SL(-1)

CRT1-MD16SL(-1) *NEW*

SmartSlice GRT1 Series

■ CompoNet Communications Unit

GRT1-CRT

■ SmartSlice I/O Units

GRT1-ID4(-1)
GRT1-OD4(-1)
GRT1-ROS2
GRT1-AD2
GRT1-DA2C
GRT1-DA2V
GRT1-TS2P
GRT1-CT1(-1)

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CompoNet

Product Introductions

Bit Slaves

Bit Slave with Connectors

■ IP20 Input Units
with Connectors
CRT1B-ID02S(-1)

IP20 Output Units
with Connectors
CRT1B-OD02S(-1)

■ IP54 Input Units with Connectors
CRT1B-ID02SP(-1)
CRT1B-ID04SP(-1)

IP54 Output Units with
Connectors
CRT1B-OD02SP(-1)

Bit Slaves with Clamps

■ IP54 I/O Units with Clamps
CRT1B-MD04SLP(-1)

Repeater Unit

■ Repeater Unit

CRS1-RPT01

Peripheral Devices

With CompoNet, connectors can be attached to communications cables and Units to connect to Units and branch or extend cables. The communications cable connection and branching methods depend on the type of cable and the type of branch.

■ There are three types of cable used with CompoNet.

● Round Cable I (VCTF 2-conductor cable), Commercially Available
● Standard Flat Cable I: DCA4-4F10
● Sheathed Flat Cable II: DCA5-4F10

■ The terminating resistors, connectors, and tools depend on the type of cable.

Round cable I (2-conductor cable)

Commercially available

● Open Type Connector
(for connecting Units)
DCN4-TB4

● Terminating Resistor
DRS1-T

0574E

Round cable I (4-conductor cable)

Commercially available

● Open Type Connector
(for connecting Units)
DCN4-TB4

● Terminating Resistor
DCN4-TM4

● Flat Connector Socket
DCN4-TR4

● Special Tool for
Standard Flat Cable I
DWT-A01

Standard Flat Cable I

DCA4-4F10

● Flat Connector Socket
DCN4-TR4

● Flat Connector Plug
DCN4-BR4

● Multidrop Connector
DCN4-MD4

● Terminating Resistor
DCN4-TM4

● Special Tool for
Standard Flat Cable I
DWT-A01

Sheathed Flat Cable II
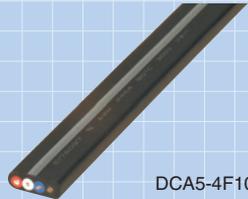
DCA5-4F10

● Flat Connector Socket
DCN5-TR4

● Flat Connector Plug
DCN5-BR4

● Terminating Resistor
DCN5-TM4

● Special Tool for Sheathed
Flat Cable II
DWT-A02

Optional Products

■ Attachment Bracket

CRT1-ATT01

For Digital I/O Slaves - 16 points
with MIL connector
CRT1-VID16ML/VOD16ML(-1)

CRT1-ATT02

For Digital I/O Slaves - 8 points
with e-CON connector
CRT1-VID08S/VOD08S(-1)

CompoNet Family

Solenoid Values

Koganei Corporation

Overseas sales areas:
Europe, North America, Asia-Pacific

📞 +81-42-383-7271   🖥 URL   www.koganei.co.jp

CompoNet-compatible Solenoid Valves: JA Series

Features
1. Thin and Compact: Valve width of only 10 mm with effective area of 3.5 mm².
2. Lower power consumption.
   Standard: 0.5 W Low current type: 0.25 W
3. Two 3-port valves in one body.

CompoNet-compatible Solenoid Valves: F Series

Features
1. Single/double dual-use valves.
2. Three of valve widths: 10, 15 and 18 mm
3. Uses dual-use fittings for different tube sizes.

Controllers, Signal Towers, and Converters

IAI Corporation

Overseas sales areas:
Europe, North America, China, Asia-Pacific

🖥 URL   http://www.intelligentactuator.com/

ROBO CYLINDER

Controller

ACON-C   PCON-C

Controller for RCA Series ROBO CYLINDER:
ACON-C/CG

Features
1. Designed for 24 VDC servomotors.
2. Multipoint positioning: up to 512 points.
3. High speed: Up to 800 mm/s.

Available soon

Controller for RCP2 Series ROBO CYLINDER:
PCON-C/CG

Features
1. Designed for 24 VDC pulse motors.
2. Multipoint positioning: up to 512 points.
3. High power in lower speed range.

Available soon

PATLITE Corporation

Overseas sales areas:
Europe, North America, China, Asia-Pacific

📞 +81-72-948-8110   🖥 URL   www.patlite.co.jp

CompoNet Supported Signal Tower:
LE-K3(B)P/W-RYG

Features
1. Use of ultra-bright LED enhanced for illumination.
2. Two selectable sound patterns with adjustable volume.

CompoNet Supported Wall-Mount Signal Tower:
WEP-K3(B)-RYG

Available soon

Features
1. A 37.5 mm-thin design that significantly enhances integration with equipment as a built-in signal system.
2. Clear vertical cut lens enhanced for illumination over a wide perspective.
3. Built-in audible alarm.

JSK Co., Ltd.

📞 +81-72-661-4071   🖥 URL   www.nihon-seigyo.co.jp

Componet-serial Transducer:
CHU-001

Available soon

Features
1. Connects to bar-code readers.
2. Allows setting from CompoNet master.
3. Supplies power to bar-code reader.

3M Company

URL www.3M.com/interconnects

Mini-Clamp Connector:
3710x-xxxx-000 FL

Features
1. IDC technology reduces process/cost of wire termination.
2. Crimped using standard pliers to reduce tool costs.
3. Design offers multiple gauges and wire size diameters.

Tyco Electronics AMP K.K

Overseas sales areas:
Europe, North America, China, Taiwan, Asia-Pacific

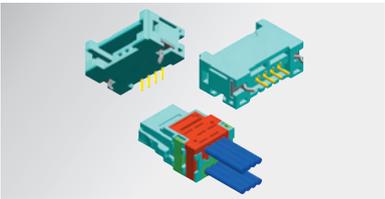+81-44-844-8080   URL www.tycoelectronics.com

RITS Connector (e-CON):
X-1473562-4

Features
1. New Chisel Press Contacts for sensor cables.
2. No special crimping tool required for easy termination.
3. Two contact points for good connection and more security.

Honda Connectors, Inc

Overseas sales areas:
Europe, North America, China, Asia-Pacific, Southeast Asia

+81-6-6376-4717   URL www.honda-connectors.co.jp

Connector:
HCN-MD4SMUG( )+

Available soon

Features
1. One piece connector.
2. Low profile.
3. The current tool can be used for assembly.

SWCC Showa Cable Systems Co., Ltd.

Overseas sales areas:
China, Taiwan, Asia-Pacific

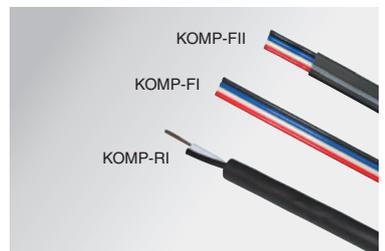+81-3-3597-7117   URL www.swcc.co.jp/

CompoNet Cable

Available soon

Features
Ⓐ TCN-F1   Flat Cable I (4-wire)
Ⓑ TCN-F2   Flat Cable II (4-wire, with sheath)
Ⓒ TCN-R1   Round Cable I (2-wire)

Kuramo Electric Co., Ltd.

Overseas sales areas:
North America, China, Asia-Pacific

+81-778-22-1500   URL www.kuramo.co.jp

KOMP Series
CompoNet Flat Cable I:
KOMP-FI

Features
1. Heat resistance (90°)
2. Flame resistance (Vertical Tray Flame Test)
3. UL certification (UL13, CL2) (under development)

Available soon

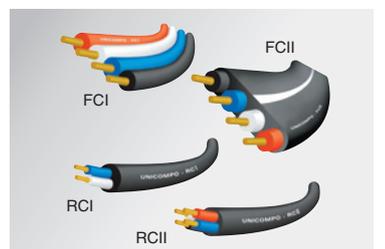**CompoNet Flat Cable II:**
KOMP-FII

Features
1. Heat resistance (90°)
2. Flame resistance (Vertical Tray Flame Test)
3. Flame resistance (Vertical Tray Flame Test)
4. UL certification (UL13 PTLC, UL444 CM) (under development)

CompoNet Round
Cable I and II:
KOMP-RI and KOMP-RII

Available soon

Nichigoh Communication Electric Wire Co., Ltd

+81-72-923-5104   URL www.nichigoh.co.jp

UNICOMPO
FCI (CompoNet Flat I)
FCII (CompoNet Flat II)
RCI (CompoNet Round I)
RCII (CompoNet Round II)

Under development

Features
1. Scheduled acquisition of CE marking and UL/Cul certification.
2. NFPA70(NEC) listing.
3. Excellent oil resistance (UNICOMPO FCII, RCI, RCII)

Connectors

Cables

CompoNet Family

Kanetsu Co., Ltd

Overseas sales area: China

☎ +81-75-662-0996   ✉ info-kanetsu@kanetsu.co.jp   🖥 www.kanetuu.co.jp

CompoNet Flat Cable I and II

Daiko. E.W.
KCNF

Features

1. Enables using unique isolation-displacement connectors for CompoNet.
2. Easy one-step IDC connection without insulation stripping.
3. UL AWM, compliant.

Taiyo Electric Wire & Cable Co., Ltd.
KCNF-J

Features

1. Enables using unique isolation-displacement connectors for CompoNet.
2. PVC jackets with polarity guide line for IP54 system.
3. Easy one-step IDC connection without insulation stripping.
4. UL AWM, compliant.

Oil-resistant and Highly Flexible Round Cable II for CompoNet

Taiyo Electric Wire & Cable Co., Ltd.
KCNR-4

Features

1. The cable can be used for mobile and oil-resistant wiring.
2. Insulation colors as recommended by CompoNet specification.
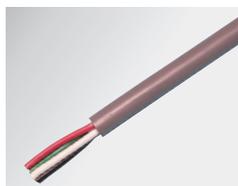3. UL AWM, compliant.

Available soon

Hanshin Electric Wire & Cable Co., Ltd.
MRC-4

Features

1. The cable can be used for mobile and oil-resistant wiring.
2. Round cable for low cost installation.
3. UL AWM, CSA compliant.

CompoNet Round Cable I and II

Onamba Co., Ltd
VCTF-2C & VCTF-4C

Feature

Round cable for low cost installation.

Kawai Cable, Ltd.
VCTF-2C & VCTF-4C

Feature

Round cable for low cost installation.

Cables

CompoNet Information

The CX-One now includes the CompoNet Tool.

(Auto-updating is available from March 2008.)

The CX-Integrator allows online reading of the system configuration for PLC networks and serial communications from a personal computer. It makes monitoring network connections, parameter settings, and network diagnosis from a computer very simple.

A file converter from CompoNet Tool to CX-Integrator is available.
Please contact the OMRON sales division.

Connectable with Round Cable II (4-conductor cable).

Officially approved by ODVA in November 2007. See page 14 for wiring restrictions.

● **ODVA Website**   **http://www.odva.org**

Visit ODVA's website for products that conform with CompoNet.

MEMO

Read and Understand this Catalog

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

Warranty and Limitations of Liability

WARRANTY

OMRON's exclusive warranty is that the products are free from defects in materials and workmanship for a period of one year (or other period if specified) from date of sale by OMRON.

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Application Considerations

SUITABILITY FOR USE

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of products in the customer's application or use of the products.

Take all necessary steps to determine the suitability of the product for the systems, machines, and equipment with which it will be used.

Know and observe all prohibitions of use applicable to the products.

NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS ARE PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

PROGRAMMABLE PRODUCTS

OMRON shall not be responsible for the user's programming of a programmable product, or any consequence thereof.

Disclaimers

CHANGE IN SPECIFICATIONS

Product specifications and accessories may be changed at any time based on improvements and other reasons.
Consult with your OMRON representative at any time to confirm actual specifications of purchased products.

DIMENSIONS AND WEIGHTS

Dimensions and weights are nominal and are not to be used for manufacturing purposes, even when tolerances are shown.

PERFORMANCE DATA

Performance data given in this catalog is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of OMRON's test conditions, and the users must correlate it to actual application requirements. Actual performance is subject to the OMRON *Warranty and Limitations of Liability.*

Note: Do not use this document to operate the Unit.

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