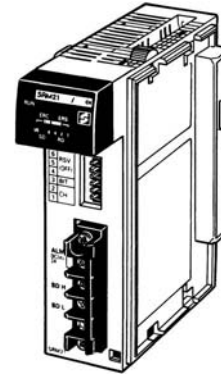


# CompoBus/S Master Unit CQM1-SRM21-V1

The CompoBus/S Master Unit supports both a High-speed Communications Mode and a Long-distance Communications Mode.



- Number of I/O points per Master: 128 max. (may be set to 64 or 32 points)
- Number of Slaves per Master: 16 or 32
- Communications cycle time: 0.5 ms max. (baud rate: 750 kbps)
- Communications distance: 500 m max. (baud rate: 93.75 kbps)
- Supports Analog Terminal connections.

## Communications Specifications

<b>Communications protocol</b>		Dedicated CompoBus/S protocol			
<b>Code</b>		Manchester code			
<b>Connection method</b>		Multi-drop, T-type bifurcation (both methods require external terminating resistor) (See note 1.)			
<b>Baud rate</b>		750 kbps, 93.75 kbps (selectable with a DIP switch) (See note 2.)			
<b>Communications cycle time</b>	<b>High-speed Communications Mode</b>	0.5 ms (with a maximum number of 8 Input and 8 Output Slaves) 0.8 ms (with a maximum number of 16 Input and 16 Output Slaves)			
	<b>Long-distance Communications Mode</b>	4.0 ms (with a maximum number of 8 Input and 8 Output Slaves) 6.0 ms (with a maximum number of 16 Input and 16 Output Slaves)			
<b>Cable</b>		Two-conductor cable (VCTF 0.75 x 2), four-conductor cable (VCTF 0.75 x 4), or dedicated flat cable			
<b>Communications distance</b>	<b>High-speed Communications Mode</b>	Two-conductor VCTF cable			
		Communications Mode	Trunk line length	Branch line length	Total line length
		High-speed mode	100 m max.	3 m max.	50 m max.
		Long-distance mode	500 m max.	6 m max.	120 m max.
		Dedicated flat cable/ four-conductor VCTF cable			
Communications Mode	Trunk line length	Branch line length	Total line length		
High-speed mode (see note 3)	30 m max.	3 m max.	30 m max.		
Long-distance mode (see note 4)	Free branching (total cable length: 200 m max.)				
<b>Max. number of connectable nodes</b>		32			
<b>Error control</b>		Manchester code, frame length, and parity checks			

- Note:**
1. An external Terminating Resistor is required.
  2. Setting must be made using the DIP switch. (Change the DM setting for selecting the communications mode. Default setting: 750 kbps)
  3. If the number of Slaves connected is smaller than 16, the trunk line length can be less than 100 m and the total line length can be less than 50 m.
  4. There are no restrictions on the branching method, trunk line length, branch line length, or total line length. Connect the Terminating Resistor farthest from the Master.

# Master Unit Specifications

Internal current consumption	180 mA max. at 5 V DC
Number of I/O points	128 points (64 inputs and 64 outputs), 64 points (32 inputs and 32 outputs), or 32 points (16 inputs and 16 outputs) selectable with a switch.
Number of occupied words	128 points: 4 input words and 4 output words 64 points: 2 input words and 2 output words 32 points: 1 input word and 1 output word
Number of points per node	8 or 4 points (selectable with a switch)
Max. number of connectable Slaves	32 (with 4 points per node)
Status data	Alarm terminal output
Weight	200 g max.

**Note:** For details regarding CompoBus/S, refer to the CompoBus/S catalog (Catalog number: Q103-E1-□)

## Connections with Flat Cable

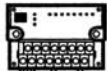
Master



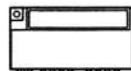
Master Unit (64 inputs and 64 outputs max. points)

Slaves

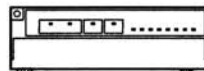
Remote I/O Terminal  
(Transistor model:  
4/8 inputs and 4/8 outputs)



Sensor Terminals  
(4/8 sensor inputs)



Bit Chain Terminals  
(8 inputs and 8 outputs)



B1T Slave



B1T terminator

Remote I/O Terminal  
(Relay model: 8/16 outputs)



Press-fit connector with terminating resistor

Press-fit connector for bifurcation

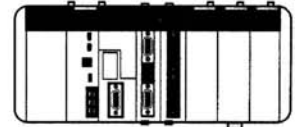
Dedicated flat cable



# Connections with VCTF Cable

Master

CQM1H



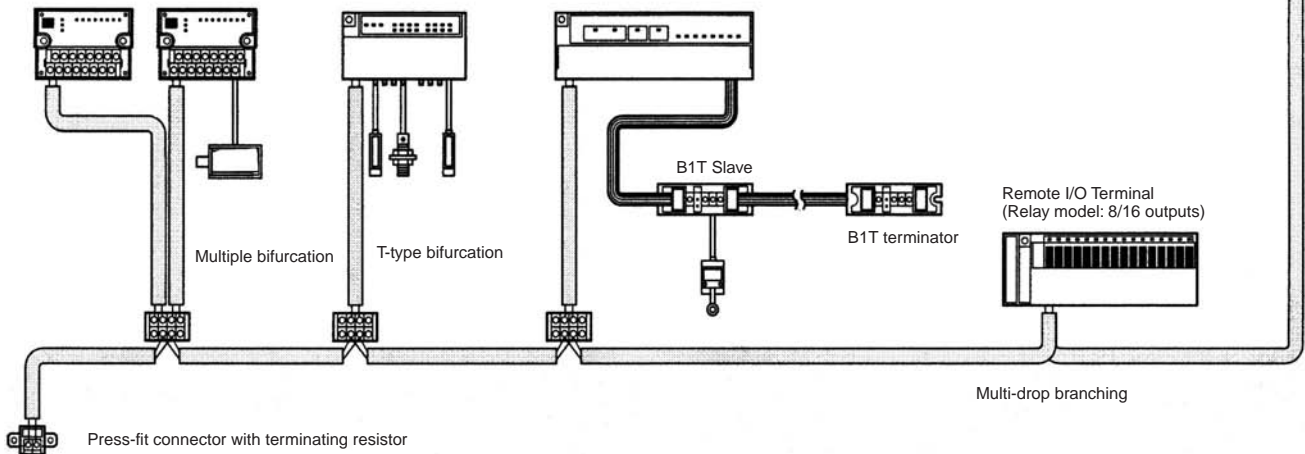
Master Unit (64 inputs and 64 outputs max.)

Slaves

Remote I/O Terminal  
(Transistor model: 4/8 inputs  
and 4/8 outputs)

Sensor Terminals  
(4/8 sensor inputs)

Bit Chain Terminals  
(8 inputs and 8 outputs)



**Note:** For details regarding CompoBus/S, refer to the CompoBus/S catalog (Catalog number: Q103-E1-□)