

# General Specifications

## Networks (for Vnet/IP)



GS 14P06S61-01E

### Overview

This General Specifications describes cables and network equipment used for BM net-F and BM net-S in B/M9000 VP.

It also covers a media converter used for the connection between the Vnet/IP fiber optic cable and the Operation Monitoring OPS.

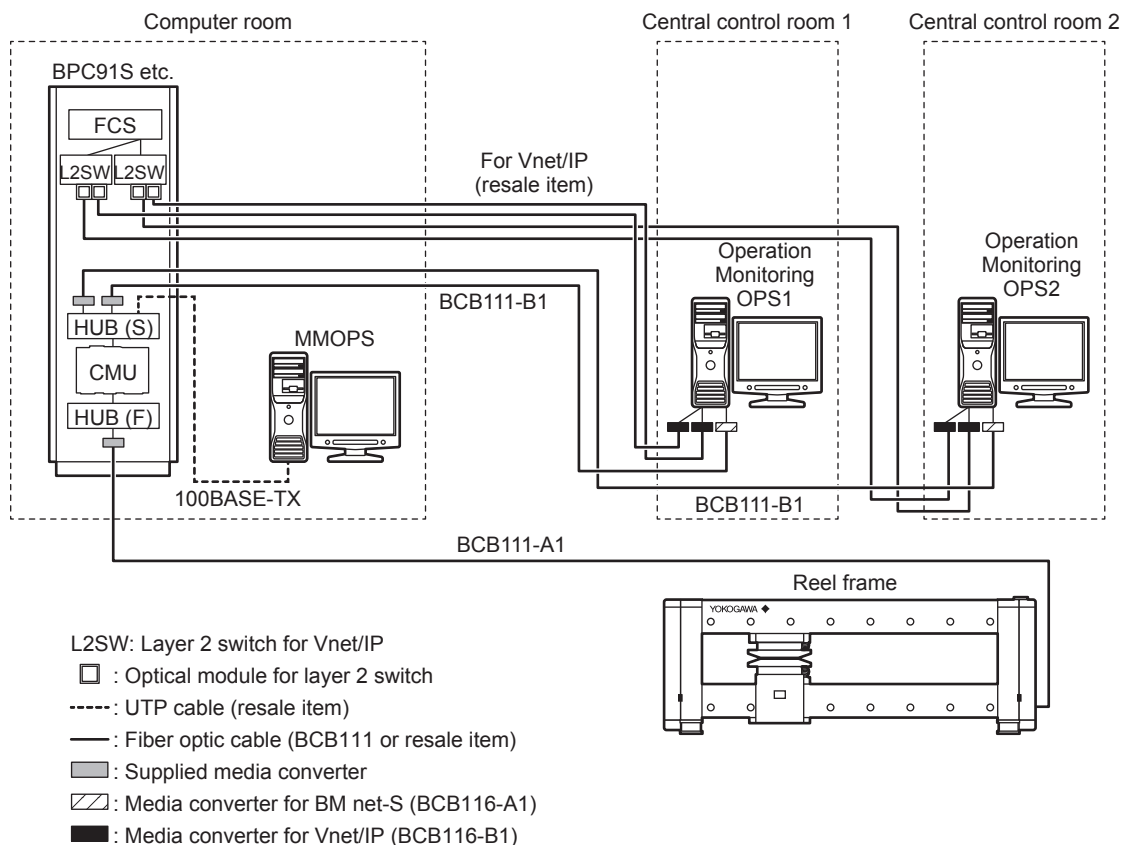
For information on other networks in CENTUM VP, refer to "Integrated Production Control System CENTUM VP System Overview (GS 33J01A10-01EN)."

### Network specifications

Both BM net-F and BM net-S are Ethernet-based networks. These networks transfer profile data measured by sensors to the Central Measurement Unit (CMU), Operation Monitoring OPS, Profile Control Unit (PRC) and Maintenance OPS (MMOPS).

For information on detailed specifications of these networks, refer to "Paper Quality Measurement and Control System B/M9000 VP System Specifications R8 (GS 14P06A01-02E)."

Use the BCB116-B1 media converter when connecting between the desktop type Operation Monitoring OPS and the Vnet/IP fiber optic cable. Follow the CENTUM VP specifications when connecting to control stations.



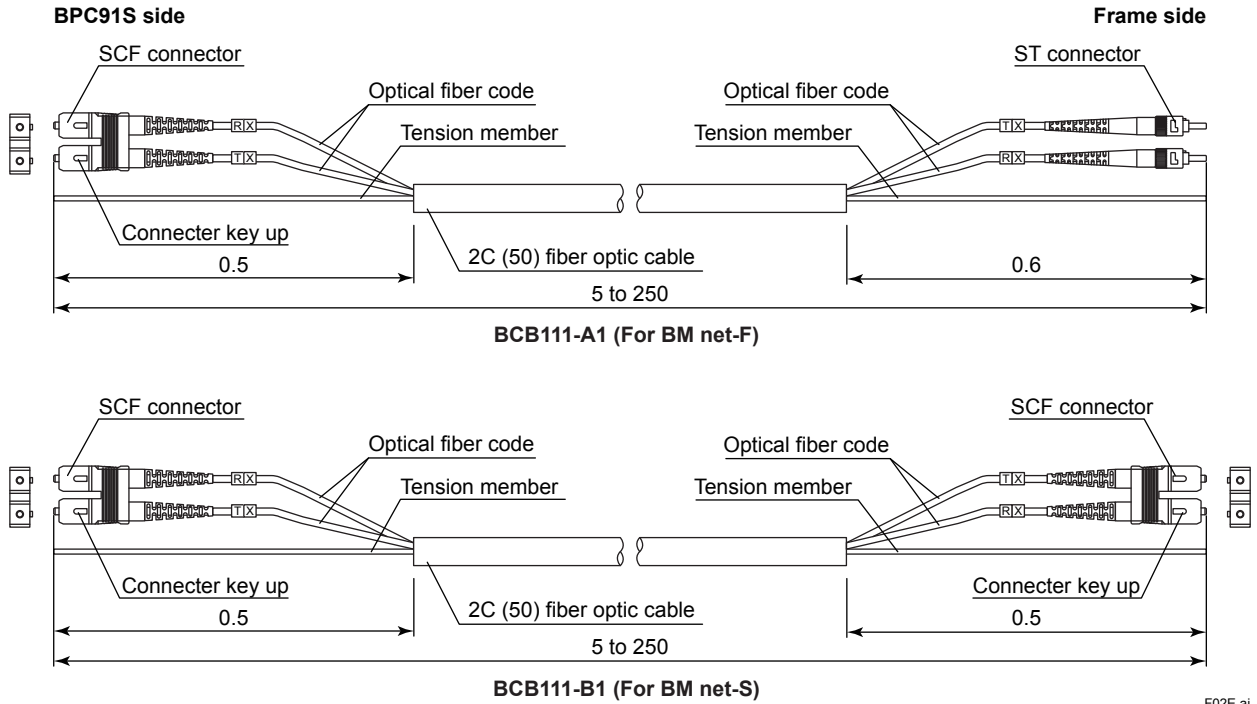
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Example of BM Net Wiring

■ Outline drawings, model and suffix codes

● BM net fiber optic cable

Unit: m  
 Standard outside diameter of sheath: 6.5 mm  
 Allowable cable bending radius: 65 mm or more  
 Allowable cable tension: 480 N or less



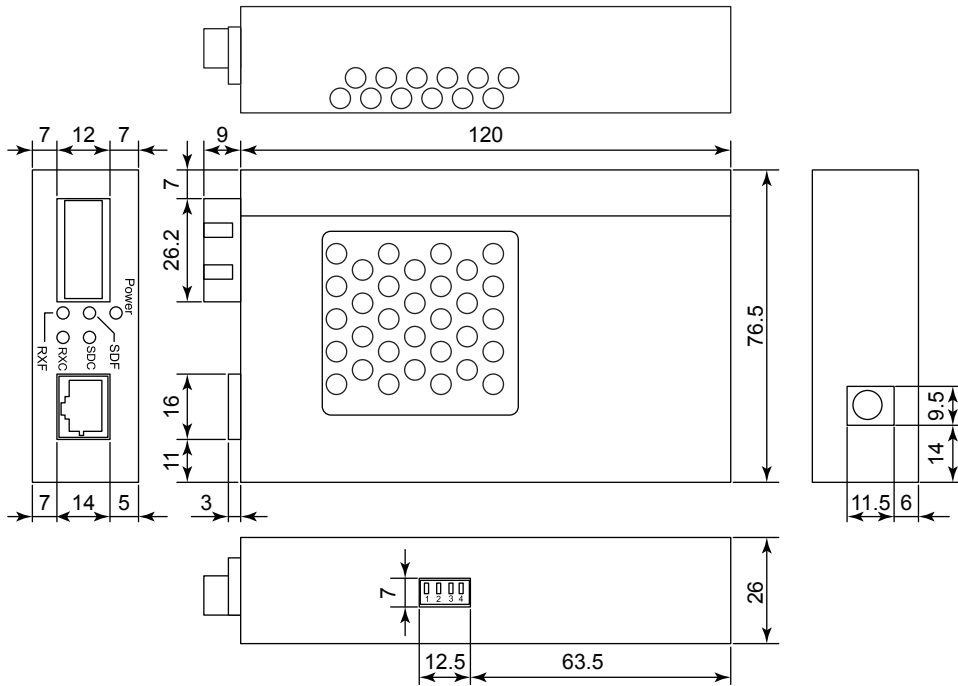
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Model	Suffix Codes	Optional Codes	Notes
<b>BCB111</b>	-----	-----	BM Net Fiber Optic Cable
Type	-A1	-----	For BM net-F (*1)
	-B1	-----	For BM net-S (*1)
Cable Length	-L005	-----	Cable Length 5 m
	-L010	-----	Cable Length 10 m
	-L020	-----	Cable Length 20 m
	-L030	-----	Cable Length 30 m
	-L040	-----	Cable Length 40 m
	-L050	-----	Cable Length 50 m
	-L060	-----	Cable Length 60 m
	-L070	-----	Cable Length 70 m
	-L080	-----	Cable Length 80 m
	-L090	-----	Cable Length 90 m
	-L100	-----	Cable Length 100 m
	-L120	-----	Cable Length 120 m
	-L140	-----	Cable Length 140 m
	-L160	-----	Cable Length 160 m
	-L180	-----	Cable Length 180 m
-L200	-----	Cable Length 200 m	
-L250	-----	Cable Length 250 m	

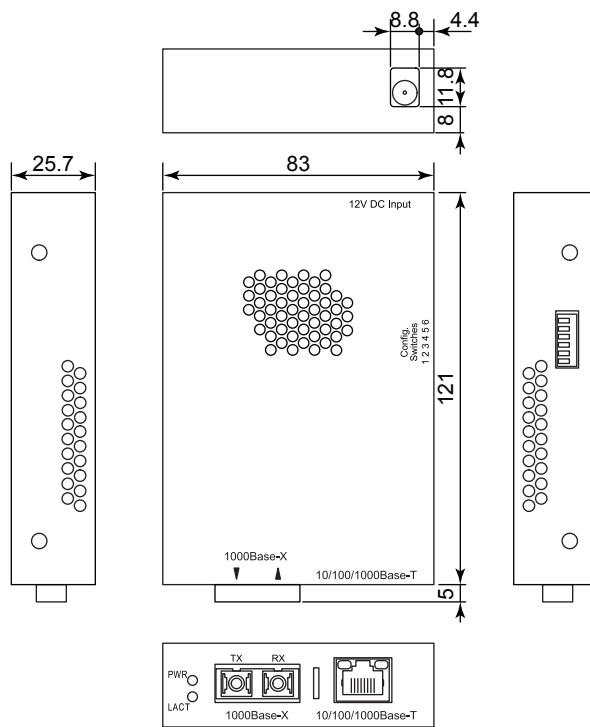
\*1: The BM net-F fiber optic cable is incompatible with the BM net-S fiber optic cable because the connector of the BM net-F cable is different from that of the BM net-S.

● Media converter

Unit: mm

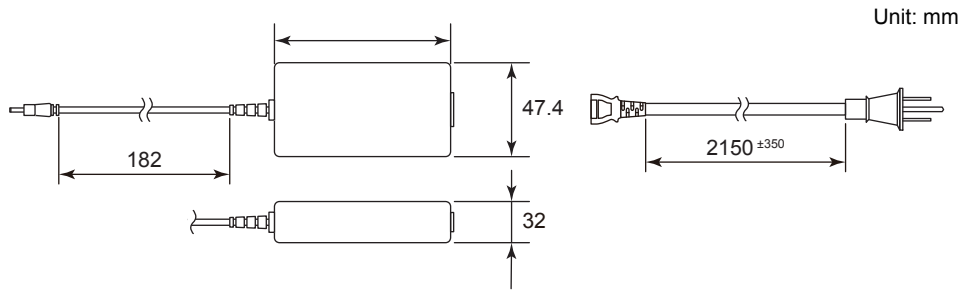


BCB116-□-A1 (Media Converter for OPS) (for BM Net)



BCB116-□-B1 (for Vnet/IP)

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**BCB116-0 (AC Adapter and Power Cable)**

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Model	Suffix Codes	Optional Codes	Notes
<b>BCB116</b>	-----	-----	Media converter (for operator station) (*1)
Power Supply	<b>-0</b>	-----	With AC adapter and power cable (for 100 to 120V AC power supply) (for in Japan) (*2)
	<b>-1</b>	-----	With AC adapter, without power cable (for 100 to 120V/220 to 240V AC power supply) (for outside Japan) (*3)
Type	<b>-A1</b>	-----	For BM net (*4)
	<b>-B1</b>	-----	For Vnet/IP (*5)

- \*1: When fiber optic cables are connected to the Operation Monitoring OPS and the MMOPS, use this device to convert fiber optic signals to signals that can be transmitted through UTP cables. Cannot be used for the connection to control stations. Order a recommended device for CENTUM VP.
- \*2: Specify this code when the final destination is in Japan.
- \*3: Specify this code when any of the following is the final destination. If not, this media converter cannot be shipped from Japan. Its equivalent must be ordered at the destination.  
Indonesia, India, Malaysia, Philippines, Singapore, Thailand, Vietnam, China, Hong Kong and Taiwan
- \*4: Order the media converter for BM net-S by the number of operator stations when the Operation Monitoring OPS and the MMOPS are connected to BM net-S using fiber optic cables.
- \*5: Order two media converters for Vnet/IP per operator station when the Operation Monitoring OPS is connected to Vnet/IP using fiber optic cables.

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