

### RCMS2802 FE Series Multiservice PDH Optical Multiplexer

RCMS2802 is a series ideal modular transmission device of optical fiber for point-to-point networks, medium-sized and small capacity networks, such as wireless communication base stations, private communication networks and switch networks. It is used to transfer E1 and fast Ethernet or Gigabit Ethernet service over optical fiber up to 120 kilometers. The transmission capacity of RCMS2802 is various according to the different part number with different deployment mode. This document is only introduce the FE series of RCMS2802. RCMS2802 has local/remote alarm indicators on front panel and local/remote loop-back function

benefiting fault location. Additionally its advanced features such as remote device power-off alarm provide carriers a flexible and reliable transmission solution of multiple E1 and Ethernet. And being inserted in managed chassis the RCMS2802 can be SNMP managed through GUI of Raisecom self-designed software NView NNM to realize monitor and configuration. The classical topology of RCMS2802 is point-to-point application with another RCMS2802 or corresponding standalone PDH fiber optical multiplexer RCMS2801. Local and remote side device can both be managed through network management software NView NNM. This document is only introduce the FE series of RCMS2802, that is RCMS2802 with FE interface.

#### RCMS2802-30FE-BL single E1 and FE FOM

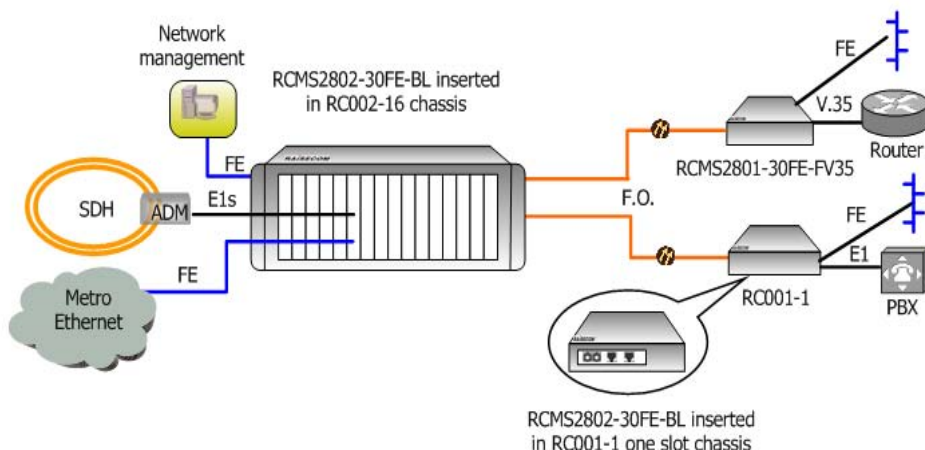
Main Feature	One E1 port, one FE port and one optical port ALS function Dying Gasp function Local and remote alarm indicator Local and remote loop-back function Local and remote management
Optical Port	Code: Scrambled NRZ 150Mbps, SC or FC connector
E1 Port	Data rate: 2048Kbps±50ppm Code: HDB3 Port: 120ohm balanced (RJ45 interface) Complied with ITU-T G.703, G.704 and G.823
FE Port	Speed: 10/100Mbps Auto-negotiation Duplex mode: Duplex Auto-negotiation Support Auto-MDI/MDIX Frame length: 1784 byte Flow control function Transparent transmission of IEEE802.1d spanning tree, IEEE802.1q VLAN package
Power Consumption	<3W
Ambience	Working temperature: 0~45 degree centigrade Working humidity: <= 90% (25 degree centigrade) Storage temperature: -40~80 degree centigrade Storage humidity: 5%~90% (non-condensing)
Dimension and Weight	module 25*91*172 mm (W*H*D) 0.13Kg



#### Deployment Chassis

RC002-16	16 slot chassis, 3U high optional SNMP management
RC002-4	4 slot chassis, 1U high with SNMP management
RC001-4	4 slot chassis, 1U high without SNMP management
RC001-1M	1 slot chassis, 1U high with SNMP management
RC001-1	1 slot chassis, 1U high without SNMP management

#### Application



#### Compliance

Standards & protocols	CE certification; UL certification.
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### RCMS2802 FE Series Multiservice PDH Optical Multiplexer

#### RCMS2802-60FE-BL one FE and 2E1 capacity

Main Feature	Two E1 ports, one FE port and one optical port ALS function Dying Gasp function Local and remote alarm indicator Local and remote loop-back function Local and remote management
Optical Port	Code: Scrambled NRZ 150Mbps, SC or FC connector
E1 Port	Data rate: 2048Kbps±50ppm Code: HDB3 Port: 120ohm balanced (2 E1 ports in one RJ45 interface) Complied with ITU-T G.703, G.704 and G.823
FE Port	Speed: 10/100Mbps Auto-negotiation Duplex mode: Duplex Auto-negotiation Support Auto-MDI/MDIX Frame length: 1784 byte Flow control function Transparent transmission of IEEE802.1d spanning tree, IEEE802.1q VLAN package
Power Consumption	<3W
Ambience	Working temperature: 0~45 degree centigrade Working humidity: <= 90% (25 degree centigrade) Storage temperature: -40~80 degree centigrade Storage humidity: 5%~90% (non-condensing)
Dimension and Weight	module 25*91*172 mm (W*H*D) 0.13Kg

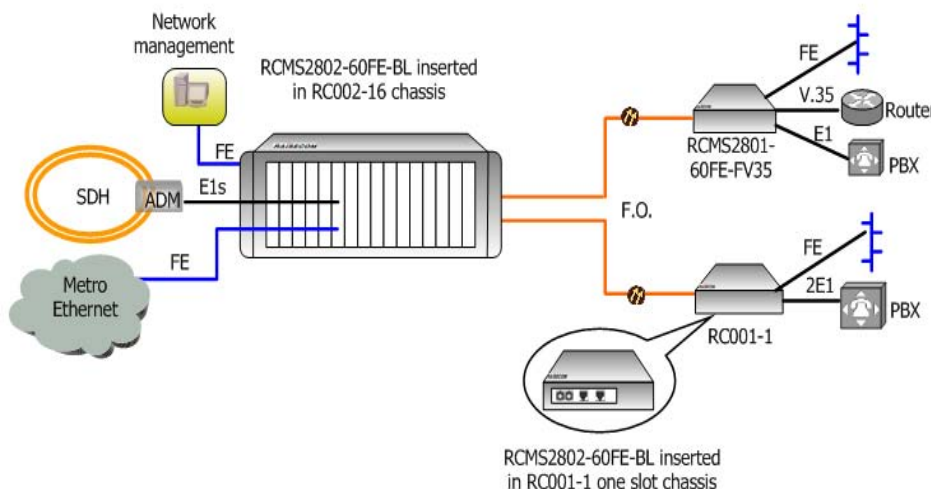


RCMS2802-60FE-BL

#### Deployment Chassis

RC002-16	16 slot chassis, 3U high optional SNMP management
RC002-4	4 slot chassis, 1U high with SNMP management
RC001-4	4 slot chassis, 1U high without SNMP management
RC001-1M	1 slot chassis, 1U high with SNMP management
RC001-1	1 slot chassis, 1U high without SNMP management

#### Application



#### Compliance

Standards & protocols	CE certification; UL certification.
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## RCMS2802 FE Series Multiservice PDH Optical Multiplexer

### RCMS2802-120LFE(-BL) one FE and 4E1 capacity

Main Feature	Four E1 ports, one FE port and one optical port ALS function Dying Gasp function Local and remote alarm indicator Local and remote loop-back function Local and remote management
Optical Port	Code: Scrambled NRZ 150Mbps, SC or FC connector
E1 Port	Data rate: 2048Kbps±50ppm Code: HDB3 Port: RCMS2802-120LFE-BL has 4 120ohm balanced E1 (in two RJ45) RCMS2802-120LFE has 4 75ohm unbalanced E1 (in one DB37) Complied with ITU-T G.703, G.704 and G.823
FE Port	Speed: 10/100Mbps Auto-negotiation Duplex mode: Half/Full Duplex Auto-negotiation Support Auto-MDI/MDIX Frame length: 1784 byte Flow control function Transparent transmission of IEEE802.1d spanning tree, IEEE802.1q VLAN package
Power Consumption	<6W
Ambience	Working temperature: 0~45 degree centigrade Working humidity: <= 90% (25 degree centigrade) Storage temperature: -40~80 degree centigrade Storage humidity: 5%~90% (non-condensing)
Dimension and Weight	module 91*50*172 mm (W*H*D) 0.2Kg



RCMS2802-120LFE-BL

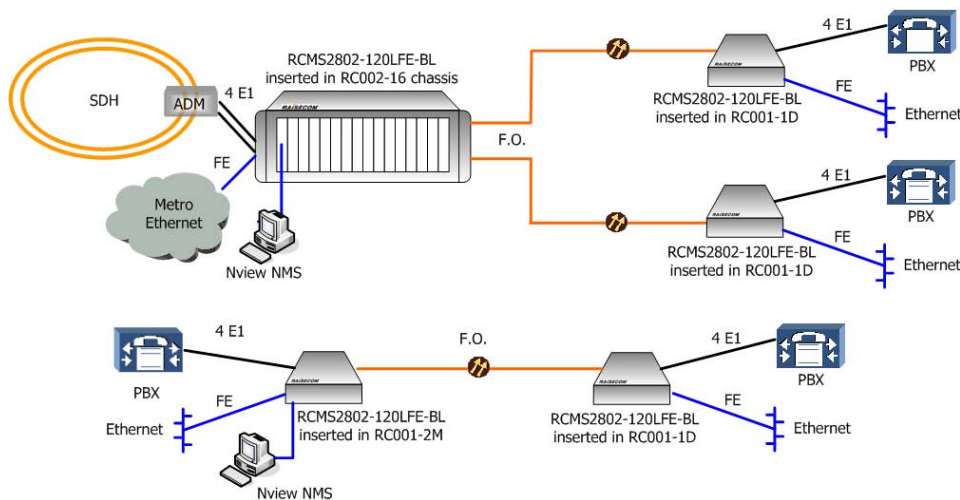
### Deployment Chassis

RC002-16	16 slot chassis, 3U high optional SNMP management
RC001-2M	2 slot chassis, 1U high with SNMP management
RC001-1D	1 slot chassis, Standalone, without SNMP management

### Compliance

Standards & protocols	CE certification; UL certification.
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### Application







## RCMS2802 FE Series Multiservice PDH Optical Multiplexer

### RCMS2802-120FE(-BL) one FE and 4E1 capacity

Main Feature	4 E1 ports, one FE port and one optical port ALS function Dying Gasp function Local and remote alarm indicator Local and remote loop-back function Local and remote management
Optical Port	Code: Scrambled NRZ 150Mbps, SC or FC connector
E1 Port	Data rate: 2048Kbps±50ppm Code: HDB3 Port: DB37 (4E1 balanced or unbalanced optional) Complied with ITU-T G.703, G.704 and G.823 suggestion
FE Port	Speed: 10/100Mbps Auto-negotiation Duplex mode: Duplex Auto-negotiation Support Auto-MDI/MDIX Frame length: 1784 byte Flow control function complied with IEEE802.3, IEEE802.3u standard
Power Consumption	<10W
Ambience	Working temperature: 0~45 degree centigrade Working humidity: <= 90% (25 degree centigrade) Storage temperature: -40~80 degree centigrade Storage humidity: 5%-90% (non-condensing)
Dimension and Weight	module 25*240*225 mm (W*H*D) 0.4 Kg

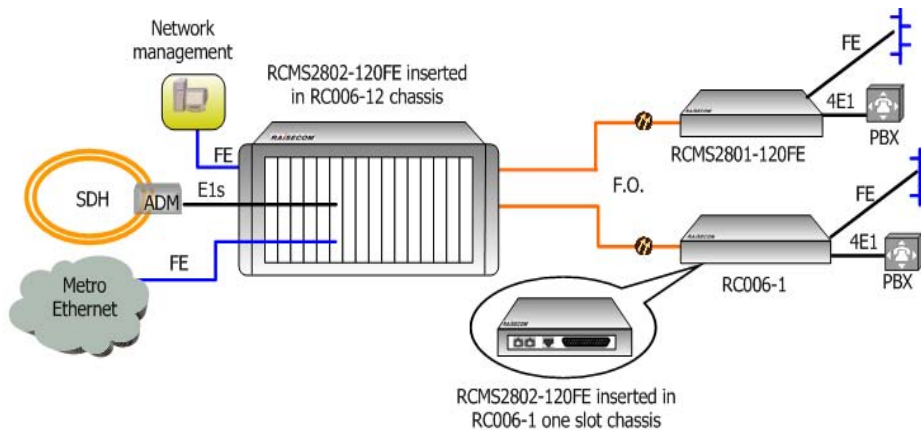


RCMS2802-120FE  
RCMS2802-120FE-BL

### Deployment Chassis

RC006-12	12 slot chassis, 6U high withl SNMP management
RC006-1M	1 slot chassis, 1U high with SNMP management
RC006-1	1 slot chassis, 1U high without SNMP management

### Application



### Compliance

Standards & protocols	CE certification; UL certification.
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### RCMS2802 FE Series Multiservice PDH Optical Multiplexer

#### RCMS2802-240FE(-BL) one FE and 8E1 capacity

Main Feature	8 E1 ports, one FE port and one optical port ALS function Dying Gasp function Local and remote alarm indicator Local and remote loop-back function Local and remote management
Optical Port	Code: Scrambled NRZ 150Mbps, SC or FC connector
E1 Port	Data rate: 2048Kbps±50ppm Code: HDB3 Port: DB37 (8E1 balanced or unbalanced optional) Complied with ITU-T G.703, G.704 and G.823
FE Port	Speed: 10/100Mbps Auto-negotiation Duplex mode: Duplex Auto-negotiation Support Auto-MDI/MDIX Frame length: 1784 byte Flow control function complied with IEEE802.3, IEEE802.3u standard
Power Consumption	<10W
Ambience	Working temperature: 0~45 degree centigrade Working humidity: <= 90% (25 degree centigrade) Storage temperature: -40~80 degree centigrade Storage humidity: 5%-90% (non-condensing)
Dimension and Weight	module 25*240*225 mm (W*H*D) 0.4 Kg

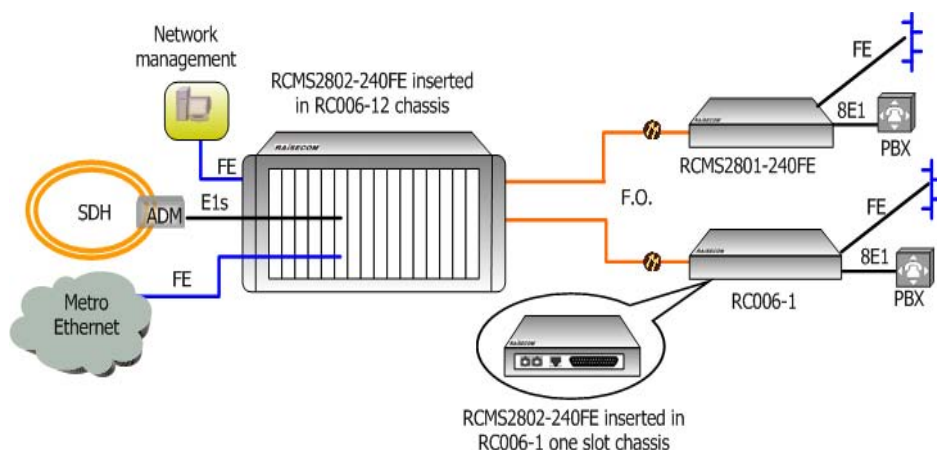


RCMS2802-240FE  
RCMS2802-240FE-BL

#### Deployment Chassis

RC006-12	12 slot chassis, 6U high withl SNMP management
RC006-1M	1 slot chassis, 1U high with SNMP management
RC006-1	1 slot chassis, 1U high without SNMP management

#### Application



#### Compliance

Standards & protocols	CE certification; UL certification.
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### RCMS2802 FE Series Multiservice PDH Optical Multiplexer

#### Ordering Information

Part Number	Description
RCMS2802-30FE-BL-X	module in RC002 chassis, one 120ohm balanced E1 port (RJ45), one 10/100M Fast Ethernet port and one optical port
RCMS2802-60FE-BL-X	module in RC002 chassis, two 120ohm balanced E1 ports (RJ45), one 10/100M Fast Ethernet port and one optical port
RCMS2802-120LFE-X	module in RC002 chassis, taking 2 slots, four 75ohm unbalanced E1 ports (DB37, need an adapting cable), one 10/100M Fast Ethernet port and one optical port
CBL-E1-DB37/8BNM	Optional adapting cable: DB37 female connector to 8 BNC male connector
CBL-E1-DB37/8BNCF	Optional adapting cable: DB37 female connector to 8 BNC female connector
RCMS2802-120LFE-BL-X	module in RC002 chassis, taking 2 slots, four 120ohm balanced E1 ports (RJ45), one 10/100M Fast Ethernet port and one optical port
RCMS2802-240LFE-X	module in RC002 chassis, taking 2 slots, eight 75ohm unbalanced E1 ports (DB37, need an adapting cable), one 10/100M Fast Ethernet port and one optical port
CBL-E1-DB37/16BNM	Optional adapting cable: DB37 female connector to 16 BNC male connector
CBL-E1-DB37/16BNCF	Optional adapting cable: DB37 female connector to 16 BNC female connector
RCMS2802-240LFE-BL-X	module in RC002 chassis, taking 2 slots, eight 120ohm balanced E1 ports (RJ45), one 10/100M Fast Ethernet port and one optical port
RCMS2802-120FE-X	module in RC006 chassis, 4 75ohm unbalanced E1 ports (in one DB37), one 10/100M Fast Ethernet port and one optical port
CBL-E1-DB37/8BNM	Optional adapting cable: DB37 female connector to 8 BNC male connector
CBL-E1-DB37/8BNCF	Optional adapting cable: DB37 female connector to 8 BNC female connector
RCMS2802-120FE-BL-X	module in RC006 chassis, 4 120ohm balanced E1 ports (DB37, need an adapting cable), one 10/100M Fast Ethernet port and one optical port
CBL-E1-DB37/4RJ45	Adapting cable: DB37 female connector to 4 RJ45 connector
RCMS2802-240FE-X	module in RC006 chassis, 8 75ohm unbalanced E1 ports (in one DB37), one 10/100M Fast Ethernet port and one optical port
CBL-E1-DB37/16BNM	Optional adapting cable: DB37 female connector to 16 BNC male connector
CBL-E1-DB37/16BNCF	Optional adapting cable: DB37 female connector to 16 BNC female connector
RCMS2802-240FE-BL-X	module in RC006 chassis, 8 75ohm balanced E1 ports (in one DB37), one 10/100M Fast Ethernet port and one optical port
CBL-E1-DB37/8RJ45	Adapting cable: DB37 female connector to 8 RJ45 120ohm balanced connector

#### X - Fiber Interface Specification

	Wavelength (nm)	Rx sensitivity (dBm)	Tx Power (dBm)	Typical distance (km)	Attenuation (dB/Km)	Min overload (dBm)	Description
M	1310/850*	<-28	-20 - -14	2	3	>-14	Multi-mode, dual strand fiber, 3Km
S1	1310	<-34	-15 - -8	25	0.5	>-8	Single mode, dual strand fiber, 25Km
S2	1310	<-34	-5 - 0	60	0.5	>-8	Single mode, dual strand fiber, 60Km
S3	1550	<-36	-5 - 0(DFB)	120	0.25	>-10	Single mode, dual strand fiber, 120Km
SS13	1310Tx 1550Rx	<-30	-12 - -3	25	0.5	>-8	Single mode, dual strand fiber, 25Km, work with SS15
SS15	1550Tx 1310Rx	<-30	-12 - -3	25	0.5	>-8	Single mode, dual strand fiber, 25Km, work with SS13
SS23	1310Tx 1550Rx	<-32	-5 - 0	50	0.5	>-8	Single mode, dual strand fiber, 50Km, work with SS15
SS25	1550 Tx 1310 Rx	<-32	-5 - 0(DFB)	50	0.5	>-8	Single mode, dual strand fiber, 50Km, work with SS23
SS34	1490Tx 1550Rx	<-32	-5 - 0	100	0.5	>-8	Single mode, single strand fiber, 100Km, work with SS35
SS35	1550 Tx 1490 Rx	<-32	-5 - 0(DFB)	100	0.5	>-8	Single mode, single strand fiber, 100Km, work with SS34

\* 850nm multi-mode fiber optical interface could be customized