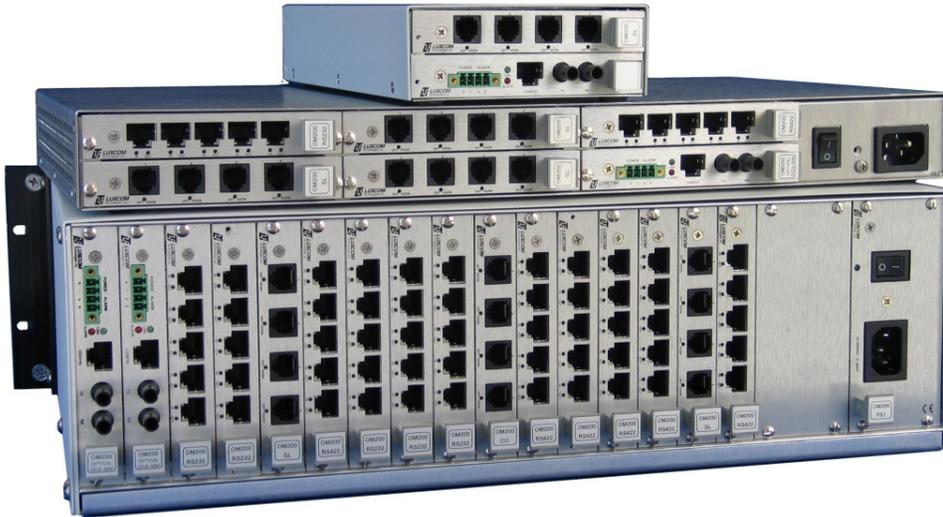


## Alarm (Interface Monitor) Interface For OM200 SONET-OC3 Multiplexer



### Chassis

- Chassis sizes of 2, 4, 6, and 16 slot.
- Optical data rate of 155Mbps
- Single or multimode fiber versions
- Point-to-point topology
- Add/drop topology
- Fiber protection ring switching

### Interfaces

#### Telephony

Subscriber Loop & CO  
 Digital - MC300  
 Digital – M3903/4  
 T1 or E1

#### Data

EIA530, RS232, V.35  
 RS485/RS232 - Add/Drop  
 RS232  
 RS485  
 Ethernet

#### Audio

Analog 2-wire  
 Analog 4-wire  
 E&M  
 Radio - Harris RF5800H

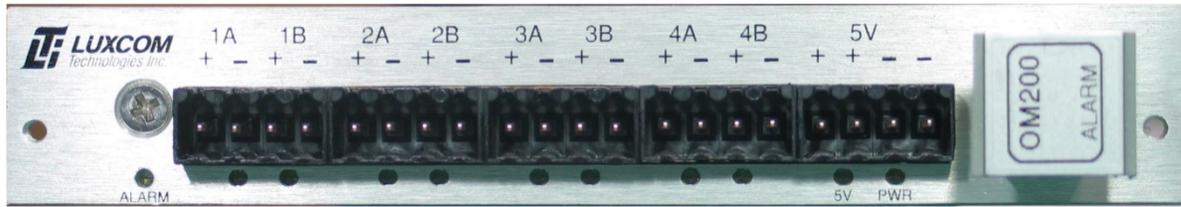
#### Other

Contact sense/closure  
 Alarm - chassis monitor  
 Radar - video  
 Optical SONET

### General

Every chassis requires at least one *Optical SONET* card and one *Interface* card.  
 Full details can be found at: [www.luxcom.com/product/om200](http://www.luxcom.com/product/om200)

## Interface: OM200-Alarm (Interface Monitor)



### Description

This interface monitors up to eight interface cards in a chassis for communication failures. This card is used when data communication integrity is a must. Each of the Alarm card's eight relay contacts can be configured to close when a particular card in the chassis fails; these contacts can be connected to an external alarm such as a buzzer. Interface card failures include, loss of synchronization, loss of connection with the remote partner card, loss of power, removal of the local or remote card, and hardware faults. It is only necessary to monitor one end of a communication link, as the alarm contacts will close if the failure is local or remote. The optical cards have a contact which closes on network failure; this and any number of alarm contacts may be wired in parallel to create a single alarm point. These alarms may be transmitted to a remote location by pairing this card with another OM200-Alarm card (or with the OM200-Contact card). A contact closure on the Alarm card will then close the same contact on the remote card. To set this up, use the network management interface as follows:

1. Set the alarm input node to "Monitor LOCAL alarms".
2. Set the alarm output node to "Monitor REMOTE alarms".
3. Set up a Data Connection between the local and remote card.

This interface may be used in an Add-Drop topology where one or more input nodes share a channel which shows up at one or more output nodes. An alarm at any of the input nodes closes the corresponding contacts at the output nodes. All of the input nodes must be adjacent to each other, and all of the output nodes must be adjacent to each other. To set this up, use the network management interface as follows:

1. Set the input nodes to "Monitor LOCAL alarms".
2. Set the output nodes to "Monitor REMOTE alarms".
3. Set up a Data Connection between each card and any other card in the chain.

**Output Ports**

The five ports may be terminal blocks or RJ45 connectors depending on the ordering option. The four pin terminal blocks come with a removable screw terminal housing. Each of the first four connectors have two I/O channels, labeled A and B. The last connector gives an isolated 5 Volt output which may be used in conjunction with a contact closure to power an external alarm. The connector pin-out is shown below.

**Terminal Blocks 1 to 4**

Pin #	Label	Description
1	A +	Closure A output 1 - non polarized
2	A -	Closure A output 2 - non polarized
3	B +	Closure B output 1 - non polarized
4	B -	Closure B output 2 - non polarized

**Terminal Block 5**

Pin #	Label	Function
1	+	+ 5 Volt
2	+	+ 5 Volt
3	-	+ 5 Volt return
4	-	+ 5 Volt return

**RJ45 Connectors 1 to 4**

Pin #	Label	Description
1	A	Closure A output 1 - non polarized
2	A	Closure A output 2 - non polarized
3		unused
4		unused
5		unused
6		unused
7	B	Closure B output 1 - non polarized
8	B	Closure B output 2 - non polarized

**RJ45 Connector 5**

Pin #	Label	Description
1		unused
2		unused
3	+	+ 5 Volt
4	+	+ 5 Volt
5	-	+ 5 Volt return
6	-	+ 5 Volt return
7		unused
8		unused

**Indicators**

Indicators below each contact are on (red) when that port is in the alarm condition.

**ALARM** On (red) indicates there is no connection with a remote partner, or a card failure.

**5V** On indicates 5 Volts is available at connector 5.

**PWR** On indicates the card has power.

**Management Port Settings:**

1 Monitor LOCAL Alarms

Use this setting if the card is to monitor card failures in this chassis.

2 Monitor REMOTE Alarms

Use this setting if the card is to monitor the alarms in a remote node. The remote node must have an alarm card which monitors local card failures.

3 Assign a contact to a card

This sets which contact will close when a failure is detected on a particular card. A contact may even be set to close when this Alarm card fails. Note that the primary optical card in slot 1 cannot be assigned an alarm contact; however the secondary optical card in slot two may.

**Specifications**

General

System bandwidth used by this card .....	0.5%
Current used by this card .....	< 1 A
Power consumption .....	< 5 W
Operating temperature .....	-40C to +70C

Contact Closure Output

Will switch inductive loads.

Current.....	< 0.5 A
Max voltage .....	< +/- 70 V
Time to detect card failure .....	< 10 second

5V Connector

I short circuit. ....	0.2 A
Rout .....	25 Ohm
Vout (+ pin w.r.t. - pin). ....	+5V +/- 15%

**Ordering Information**

Part number	OM200-Alarm-1 terminal block version
	OM200-Alarm-2 RJ45 connector version