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7SG24 Sigma

Communication Interface

Answers for energy

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7SG24 Sigma

Communication Interface

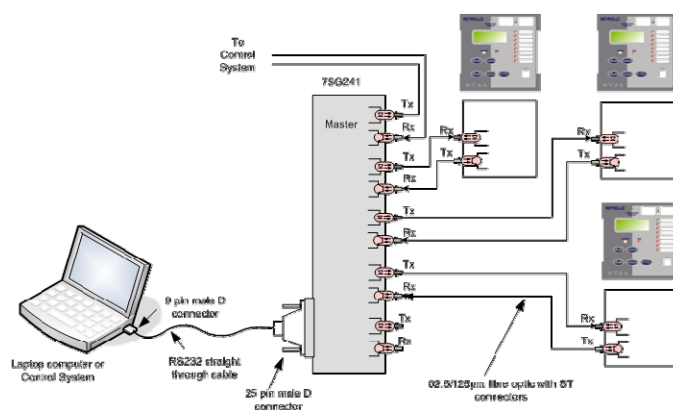


Fig 1. 7SG241 Connection Diagram

Description

The 7SG24 provide a range of relay communication interface devices between RS232 electrical and fibre optic connections.

The 7SG24 can be used to provide a single point of communication with a number of relays within fibre optic systems having a loop connected or star connected topology.



7SG243

Provides a dual RS232 to fibre optic interface for use with a single relay or ring of relays.

Power indicator

Powered from RS232 pc connection

Input for external power supply

Functional Overview



7SG241

Fibre optic hub with 5, 10, 20 or 30 channels (channel 1 is always the master channel)

Power and channel activity indicators.

Front mounted RS232 connection with automatic switchover from rear fibre master channel.

Light off and light on modes.

Suitable for glass fibres up to 3km in length

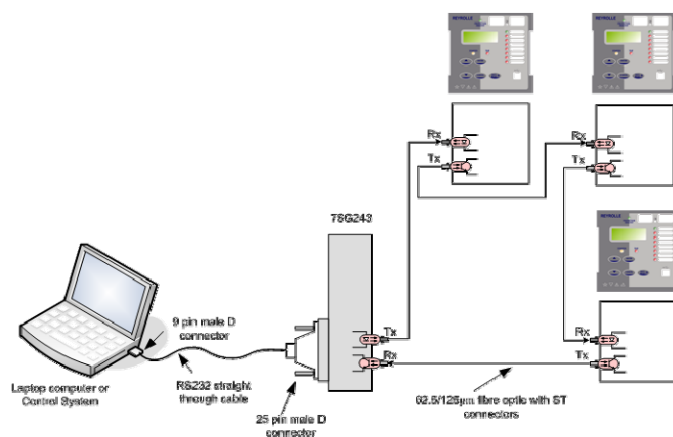


Fig 2. 7SG243 Connection Diagram



7SG244

Provides a RS232 to fibre optic interface.
 Powered from RS232 pc connection
 Input for external power supply

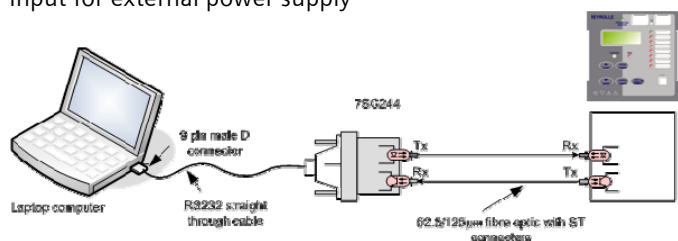


Fig 3. 7SG244 Connection Diagram

Technical Information

Optical Interface

Connectors	ST
Optimised for use	62.5/125µm
Wavelength	820nm
Launch power	-24.7 max to -20.7 min dbm
Receiver sensitivity	-24 to -9 dbm

Electrical Interface

Type	RS232
Optimised for use	25 way female D-type
Pin out	
2	Rx (Input)
3	Tx (output)
4-5	RTS/CTS (internally connected)
6-8-20	DSR/CD/DTR (internally connected)
7	Ground
9	External power (6-15V)

Auxiliary power supply input 7SG243 & 7SG244

Type	Jack socket tip +ve
Auxiliary input	6-15V dc 50mA

Auxiliary power supply input 7SG241

Type	Rear terminals 13+ve 14-ve
Nominal	Operating Range V dc
48/110v	37.5 to 137.5
220v	178.0 to 280.0
Burden	15w
Quiescent (typical)	

Ordering Information – 7SG241 Sigma 1

Product description	Variants	Order No.
Sigma 1		7 S G 2 4 □ 0 - □ □ A 0 0 - □ □ A 0 - □ □ □
		↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑
	<u>Relay type</u> Fibre Optic hub	1
	<u>Channel options</u> 5 channel 10 channel 20 channel 30 channel	1 3 5 7
	<u>Auxiliary supply</u> 48/110V DC auxiliary 220V DC auxiliary	A B
	<u>Communication interface</u> Fibre optic (ST connector)	1
	<u>Housing size</u> Case size E4 Case size E6 Case size E8	C D E

Ordering Information – 7SG243 Sigma 3

Product description	Variants	Order No.
Sigma 3		7 S G 2 4 □ 0 - □ □ A 0 0 - 0 □ A 0 - □ □ □
		↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑
	<u>Relay type</u> Fibre Optic to RS232 converter providing two RS232 interfaces.	3
	<u>Channel options</u> 1 channel, ST connectors for glass fibre	3
	<u>Auxiliary supply</u> External – see note 1	A
	<u>Housing size</u> Case special – see note 2	A

1) Self powered from PC or via pin 9 on D connector or optional external supply 6-15V DC @50mA to jack socket (tip +ve)

2) Housing Dimensions – 4U high, size 2 width panel mounted, 140mm depth, excluding fibre bend radius

3) Housing Dimensions – 85mm (l) x 58mm (w) x 19mm (h)

Ordering Information – 7SG244 Sigma 4

Product description	Variants	Order No.
Sigma 4		7 S G 2 4 □ 0 - □ □ A 0 0 - 0 □ A 0 - □ □ □
	<p><u>Relay type</u> Fibre Optic to RS232 converter providing one RS232 interface.</p> <p><u>Channel options</u> 1 channel, ST connectors for glass fibre</p> <p><u>Auxiliary supply</u> External – see note 1</p> <p><u>Housing size</u> Case special – see note 3</p>	<p>↑ 4</p> <p>↑ 3</p> <p>↑ A</p> <p>↑ A</p>

- 1) Self powered from PC or via pin 9 on D connector or optional external supply 6-15V DC @50mA to jack socket (tip +ve)
 2) Housing Dimensions – 4U high, size 2 width panel mounted, 140mm depth, excluding fibre bend radius
 3) Housing Dimensions – 85mm (l) x 58mm (w) x 19mm (h)

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The information in this document contains general descriptions of the technical options available, which may not apply in all cases. The required technical options should therefore be specified in the contract.

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