

# LS-FIBER OPTICAL INTERFACE FOR QX3440

#### **DESCRIPTION**

The LS-Fiber Optical interface is a low-speed single-slot plug-in card designed for QX3440 series to transport C37.94 teleprotection signals between power substations. Each port of the interface supports a configurable bandwidth of 1 to 12 DSO (64K), and is protected by Automatic Laser Shutdown (ALS).

Teleprotection signals are then cross-connected by the XCU to merge onto E1/T1, SDH/SONET, or Packet Network for transportation. Link and module integrity can be diagnosed via loopback signals.





QX3440-4C37-LSFOM

QX3440-4C3794-SFPA

#### **FEATURES**

- ✓ Optical fiber interface for C37.94 signals
- 1 or 4-port per card with ST or SC optical connectors, or SFP housing
- ✓ Per-port data rate up to 12 x DS0(64kb)
- ✓ Loopback and BERT for diagnostics
- ✓ Multi-color LED indicators
- ✓ With ALS (Automatic Laser Shutdown)
- √ 4-port SFP for QX3440-CCPB: 
  CHPA/Ca Chassis
- √ 1 port for QX3440-E (1U chassis)
- ✓ 1 port for QX3440



QX3440-M1C3794-**LSFOM** 



QX3440-SM1C3794-LSFOM



## **SPECIFICATIONS – LSFOM INFORMATION'S**

Where **LSFOM** is to select **LS-F**iber **O**ptical **M**odule option, each module has 5 letters.

LSFOM	Description										
Code	Mode		Data Rate		Wavelength		Distance		Connector/ Interface		Notes
	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	
ZRATT	Z	Multi-mode	R	2 M	А	820nm	Т	2km	Т	ST/UPC	
QRATT	Q	Multi-mode	R	2 M	А	850nm	Т	2km	Т	ST/UPC	
NRB2T	N	Single mode	R	2 M	В	1310nm	2	20km	Т	ST/UPC	
Т	Single mode, 1310nm, Tx_min -13dBm, Rx_max -30dBm, SC type connector.  Works with Toshiba teleprotection device in direct mode.							Must use 3 x DS0			

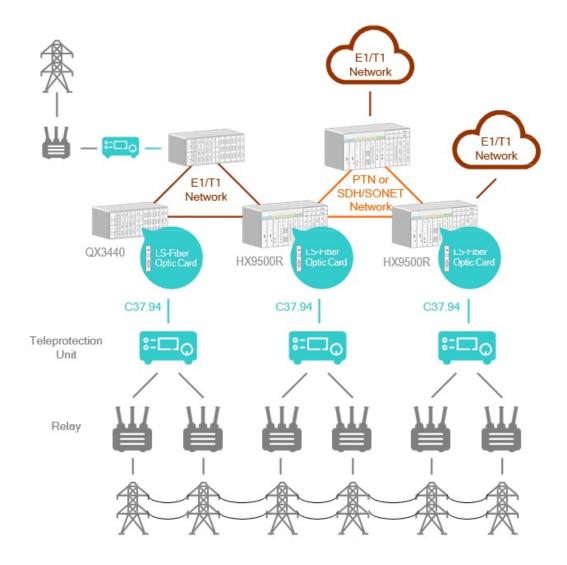
## **SFP** SPECIFICATIONS

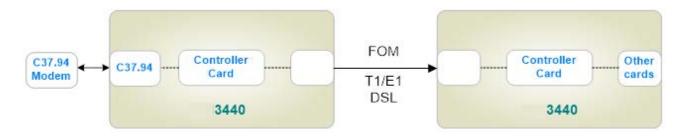
#### SFP module for QX3440-4C3794-SFPA

	Description										
Code	Mode		D	Data Rate		Wave Length		Distance		onnector	Notes
	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	
MRPTD	М	Multi-Mode	R	2 M	Р	850nm	Т	2km	D	LC connector with DDM	SFP Module
PRB2D	Р	Single-Mode	R	2 M	В	1310nm	2	20km	D	LC connector with DDM	SFP Module



## **APPLICATION**







## **ORDERING INFORMATION**

Note 1: Before purchasing, please check the QX3440 main brochure to see if the following models are supported by the controller to be used with.

#### Models

Ordering Code	Description							
QX3440-4C3794- <i>LSFOM</i>	4x fiber optic C37.94 interface card . Refer to <i>LSFOM</i> details. Chassis 5U/3U							
QX3440-M1C3794- <i>LSFOM</i>	1x fiber optic C37.94 interface card . Refer to <i>LSFOM</i> details. Chassis 5U/3U							
QX3440-SM1C3794- <i>LSFOM</i>	1x fiber optic C37.94 interface card . Refer to <i>LSFOM</i> details. QX3440-E (1U chassis)							
QX3440-4C3794-SFPA	4x fiber optic C37.94 interface card with SFP connectors (W/O SFP), please order SFP. Chassis 5U/3U							

#### Accessories

SFP Optical Module	
SFP-MRPTD	SFP MM Dual fiber, data rate 2M, Wavelength 850nm, Distance 2km, connector LC/DDM, for QX3440-4C3794-SFPA
SFP-PRB2D	SFP SM Dual fiber, data rate 2M, Wavelength 1310nm, Distance 20km, connector LC/DDM , for QX3440-4C3794-SFPA

