



FIBERWORKS

Transceiver and active cable verification, why bother?

Presented by Jørn O.Nilsen

FIBERWORKS AS

ESTABLISHED IN 1993

17

EMPLOYEES

139 MNOK

TURNOVER 2020

BUSINESS:

Fiberworks delivers cost-effective products and solutions to the fiber optic market.

VISION

YOUR NATURAL CHOICE FOR FIBER OPTIC
SOLUTIONS

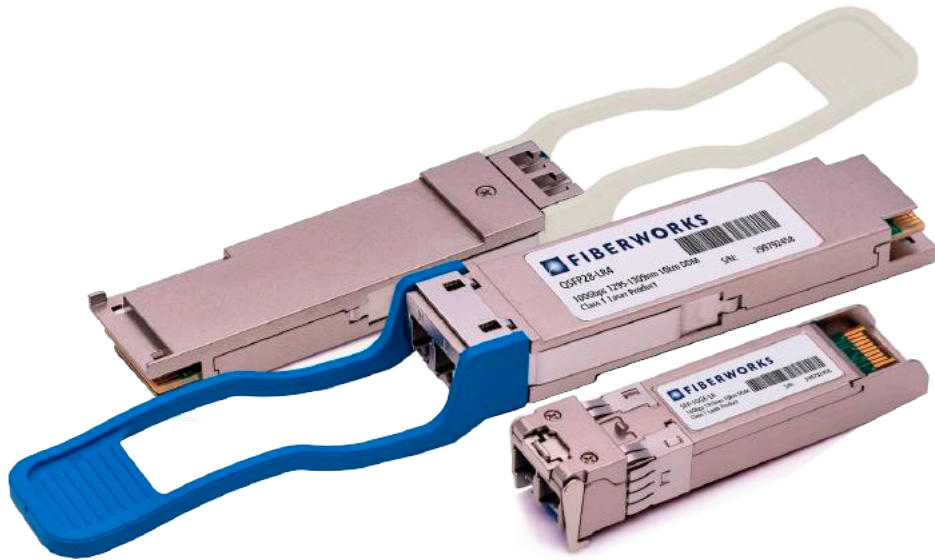


SERVICES

FIBERWORKS OFFERS A WIDE RANGE OF SERVICES TO ACCOMMODATE YOUR

- FIBERANALYSIS FOR WDM
- OPTICAL NETWORK DESIGN AND ANALYSIS
- COURSES IN FIBEROPTIC TECHNOLOGY AND WDM
- SERVICE AND REPAIR OF SUMITOMO SPLICING MACHINES

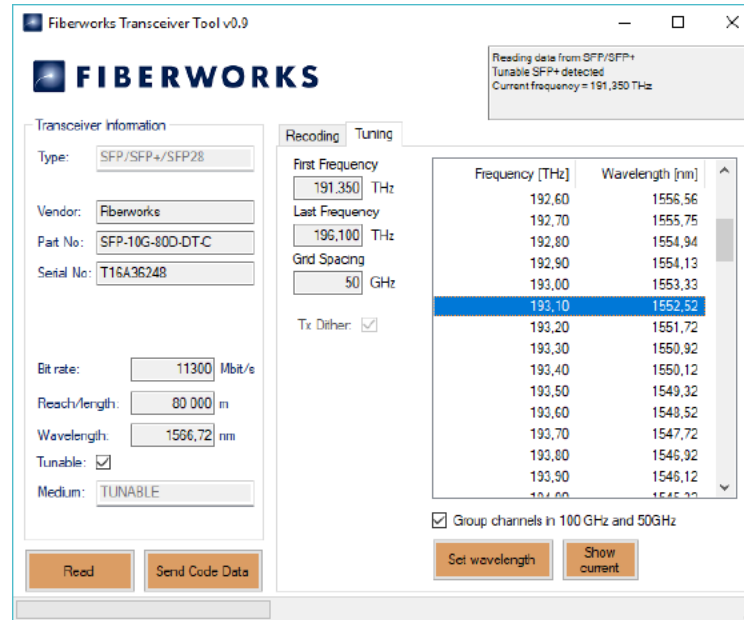
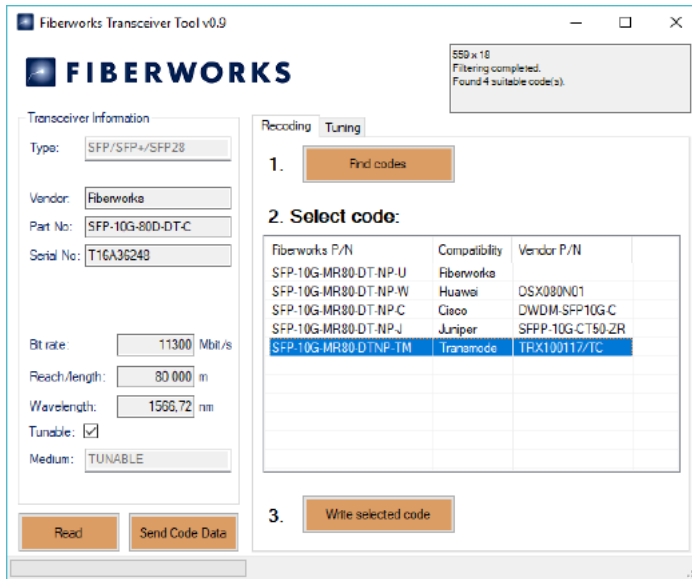
FIBERWORKS BRAND



- OPTICAL TRANSCEIVERS
- OPTICAL PASSIVE MULTIPLEXERS
- PASSIVE FIBER COMPONENTS
- TRANSCEIVER CODING BOX

FIBERWORKS CODER

Fiberworks transceiver Coder QSX-F and SFP/XFP/QSFP



Optical networks





Skilled technicians



Harsh environment



Harsh environment





VeEX

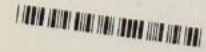
VeEX

VeEX

NOTICE
**AUTHORIZED
PERSONNEL ONLY**



BRADY #22142 BRADYID.COM Y51732



NOTICE

**AUTHORIZED
PERSONNEL ONLY**



7 54473 22142 3

BRADY #22142 BRADYID.COM Y51732





P 10GE FABRIC EXTENDER

5 6 7 8

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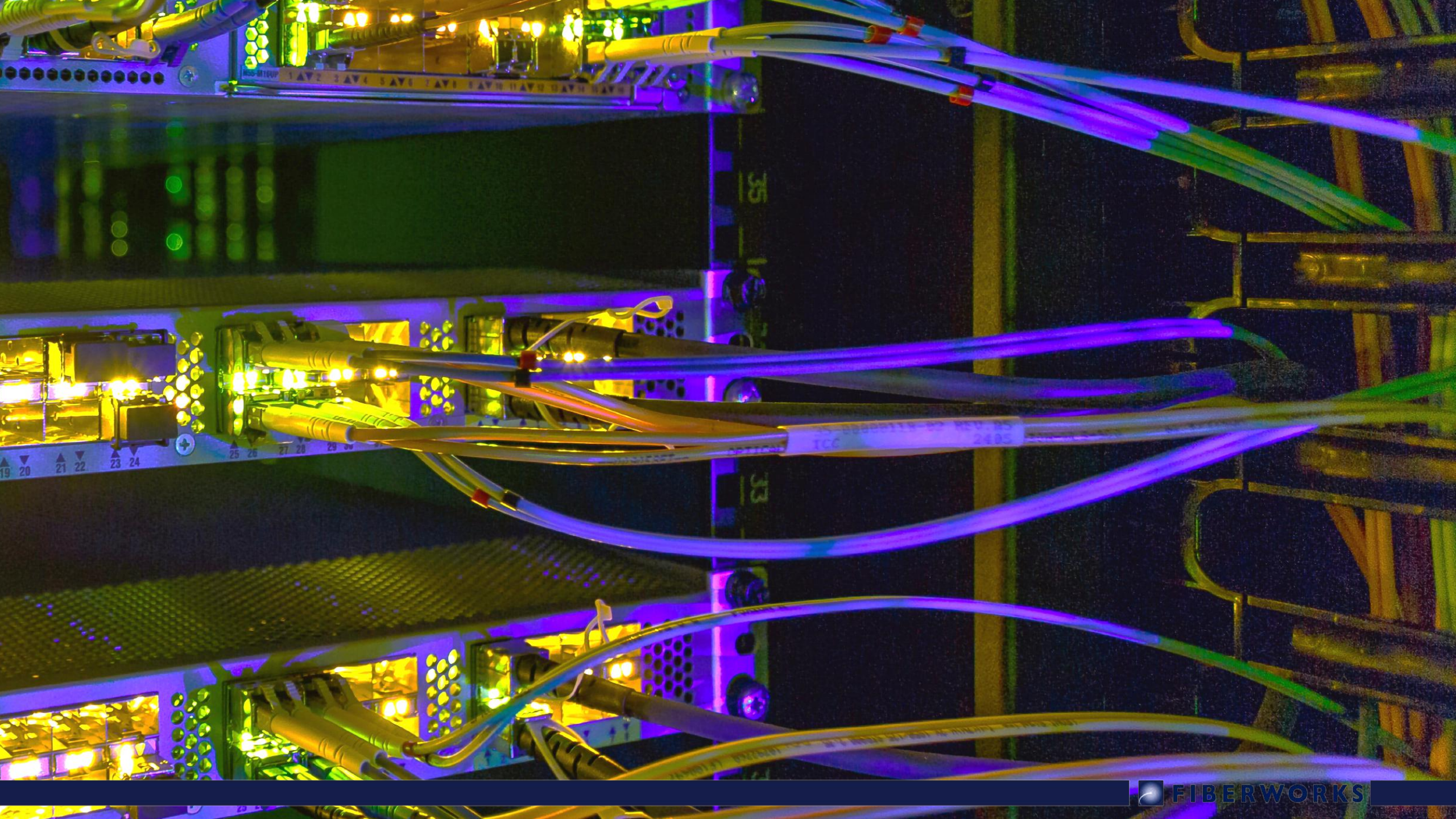
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Test DAC, AOC and networks



OTN

Ethernet

Y.1564

RFC2544

BERT

IEEE 802.3ah, ITU-T Y.1731,

IEEE 802.1ag, and MPLS-TP OAM

eCPRI

Fibre Channel

SDH

PDH

SLA



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SLA



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- Transceiver Test Measurement Setup

Transceiver Test Measurement Results

PASS

Summary

Overall	
Signal Level	Pass
Frequency Status	Pass
LANE BERT	Pass
Post-FEC	Pass

LANE BERT

Signal Result

Opt. Power (dBm)	TX Current	TX Min.	TX Max.	RX Current	RX Min.	RX Max.	Wavelength (nm)
Total	0.00	0.00	0.00	0.00	0.00	0.00	
Lane #1	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Lane #2	0.00	0.00	0.00	0.00	0.00	0.00	1295.60
Lane #3	0.00	0.00	0.00	0.00	0.00	0.00	1300.10
Lane #4	0.00	0.00	0.00	0.00	0.00	0.00	1304.60

Frequency	Frequency (kHz)	Offset (ppm)	Min. (ppm)	Max. (ppm)
Total	15312500000	0.0		
Lane #1	25781250000	0.0	-0.0	0.0
Lane #2	25781249920	-0.0	-0.0	0.0
Lane #3	25781249920	-0.0	-0.0	0.0
Lane #4	25781250080	0.0	-0.0	0.0

QSFP Optical Module Information

Vendor	Fiberworks
Part Number	QSFP28-CU-1M-SP
Serial Number	SPB2002220108-2
Bit Rate (Gbps)	25.5
Wavelength (nm)	38.0
Wavelength Tolerance(nm)	7.7
Transceiver Compliance (Hex)	88 00 00 00 00 00 80 80

QSFP Optical Module Status

Channel #1	RX LOS	TX Electrical LOS	TX FAULT
Channel #2	Normal	Normal	Normal
Channel #3	Normal	Normal	Normal
Channel #4	Normal	Normal	Normal
Temperature	0.0 C	Normal	Normal
Voltage	0 mV	Normal	Normal

Aggregate Results

ST-2021-9-28 13:51:19	
BIT Error Count	ET:00:00:31
BIT Error Ratio	0
Pattern Loss(Sec.)	0.000E+00
Pattern Loss	0

Lane Result

Lane #	Pattern Loss(Sec.)	BIT Error Count	BIT Error Ratio



VeEX MTX150x

Test Mode Selection

- Ethernet
- Ethernet Layer4+ >
- Fiber Channel >
- 10/100/1000M Base-T Single Port
- 10/100/1000M Base-T Dual Ports
- 1000M Base-X Single Port
- 1000M Base-X Dual Ports
- 100M Base-X Single Port
- 100M Base-X Dual Ports
- 10GE Single Port
- 10GE Dual Ports
- 10/100/1000M Base-T + 10GE dual ports
- 1000M Base-X + 10GE dual ports

OK

Cancel

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OPEN



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