

Gigalight touchscreen table 800G QSFP-DD+OSFP/OSFP-RHS checker 800G/400G/200G PAM4 portable BERT

Features

- ◆ Supports 800Gbps(4 & 8x53.125GBd PAM4) BER testing
- ◆ Supports 400Gbps(8x26.5625GBd PAM4) BER testing
- ◆ Supports 1xQSFP/QSFP-DD + 1xOSFP/OSFP-RHS(GUI can be used optionally , can't supported for simultaneous use)
- ◆ Supports CMIS V4.0 status monitoring and real-time DDM display
- ◆ Supports QSFP/QSFP DD/OSFP/OSFP-RHS Module Max 17W Power Consumption
- ◆ Supports EEPROM read/write with flexible configure compatibility
- ◆ Supports PRBSQ7/9/11/13/15/21/23/31 and SSPRQ patterns
- ◆ Supports FEC margin estimation and error correction capability calculation
- ◆ 10.1inch industrial touchscreen: FHD display,10-point capacitive touch, Win 11 operation system
- ◆ Shoulder strap included for easy portability
- ◆ Built-in removable battery module:
- ◆ Operating ambient temperature range: 0 to 40°C
- ◆ Total weight approx. 5kg, includes shoulder strap for easy portability
- ◆ Dimensions:320*230*89mm
- ◆ 12V DC power supply
- ◆ RoHS compliant (lead free)



Applications

- ◆ Data center field testing: on-site optical module AOC&DAC performance validation
- ◆ Production testing: All-in-one design reduces connections and improves test efficiency
- ◆ Customer field acceptance: Portable, quick deployment, better data secure
- ◆ BER&FEC margin evaluation: Supports BER testing and FEC capability calculation
- ◆ DDM real-time monitoring: Real-time readout of voltage, temperature, bias current and optical power
- ◆ EEPROM read/write

Description

Gigalight standard QSFP-DD + OSFP/OSFP-RHS Checker is an instrument which can help you to test QSFP/QSFP DD/OSFP/OSFP-RHS module. It can help you to read the internal memory EEPROM of the modules and display details of the EEPROM (such as the Part Number, Vendor Name, description and range.), monitor all DDM information. You can change the EEPROM if you know the module password. There are two types of ports 1xQSFP/QSFP-DD + 1xOSFP/OSFP-RHS, GUI can be used optionally (not supported for simultaneous use).

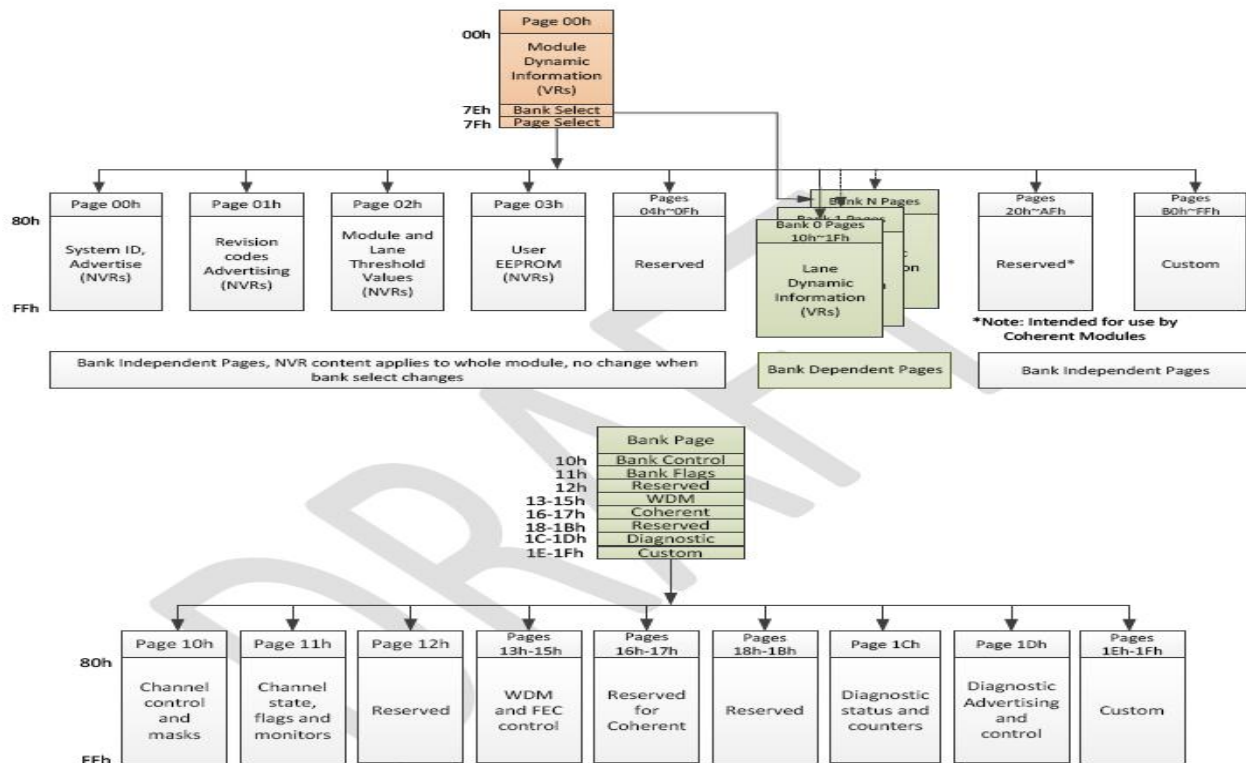
This product is a portable upgraded version base on Gigalight's standard 800G Checker, integrating a 10.1-inch industrial tablet and a built-in removable battery module for all-in-one mobile testing. It enables optical module/AOC/DAC performance testing without the need for an external computer.

Working mode

QDD mode: Can support 800G QSFPDD and 400G QSFPDD/QSFP112 module BER testing\DDM information monitor\EEPROM Data reading\LOS and LOL Status monitor and so on.

OSFP mode: Can support 800G OSFP/OSFP-RHS and 400G OSFP/OSFP-RHS module BER testing\DDM information monitor\EEPROM Data reading\LOS and LOL Status monitor and so on.

Support CMIS V4.0 Register Mapping.



Memory Map

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	V_{cc}	0	19	V
Storage Temperature	T_s	-20	75	°C
Operating ambient Temperature	T_a	-10	50	°C
Humidity (non-condensing)	Rh	5	85	%

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Supply Voltage	V_{cc}	9	12	19	V
Operating ambient Temperature	T_a	0		40	°C
Data Rate Per Lane	fd		53.125		GBd
			26.5625		GBd
Humidity	Rh	5		85	%
Power Dissipation	P_m		22	30	W
Support DUT Power Dissipation	P_{mo}			17	W

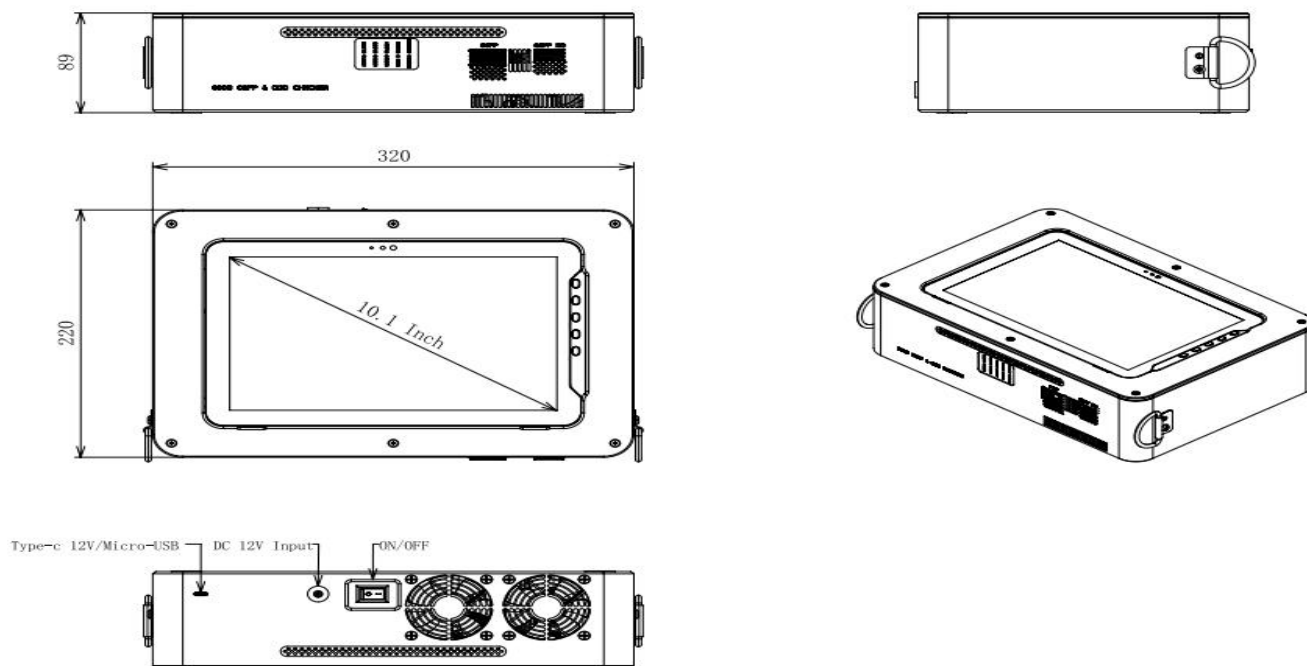
Electrical Specifications (OIF CEI-112G-VSR)

Parameter	Symbol	Min	Typical	Max	Unit
Differential input impedance	Z_{in}	90	100	110	ohm
Differential Output impedance	Z_{out}	90	100	110	ohm
Differential input voltage amplitude	ΔV_{in}			850	mVp-p
Differential output voltage amplitude	ΔV_{out}			850	mVp-p
Eye Height in the region from T_s -50 mUI to T_s + 50 mUI		10			mV

Main Frame

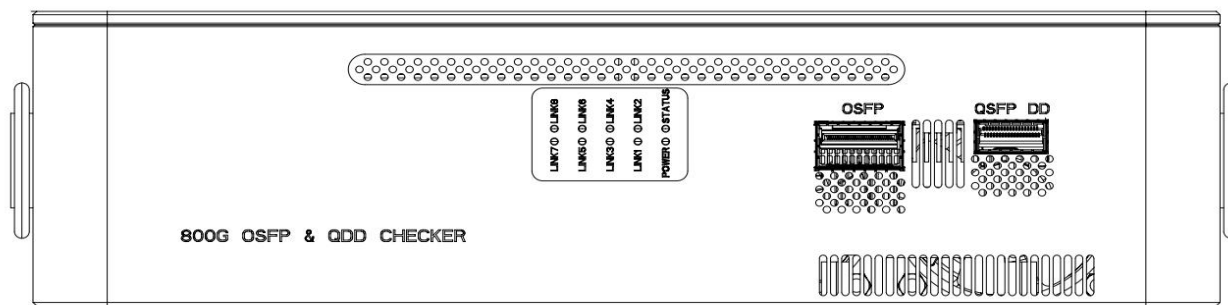
QSFP DD port	QSFP or QSFP DD
Or OSFP port	OSFP or OSFP-RHS
Transmission rate	53.125GBd PAM4 26.5625GBd PAM4
Pattern Generator	PAM4(PRBSQ7, PRBSQ9, PRBSQ10, PRBSQ11, PRBSQ13, PRBSQ15, PRBSQ20, PRBSQ23, PRBSQ31,SSPRQ)

Mechanical Dimensions



Mechanical Specifications

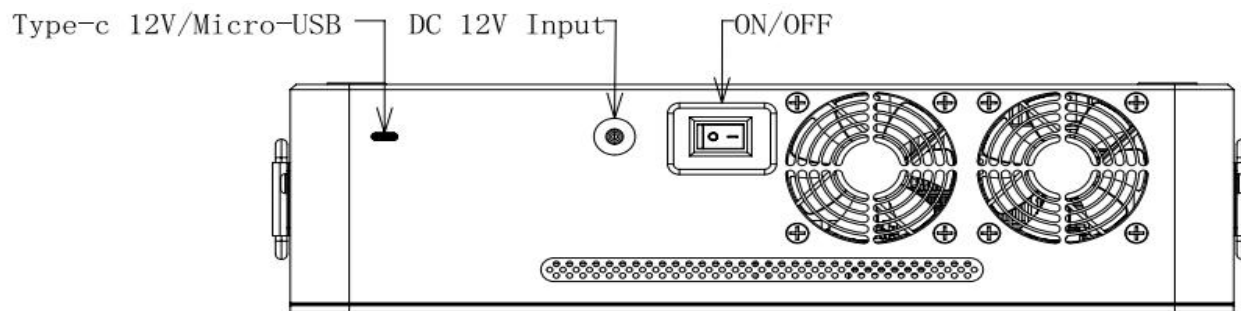
1. QSFP DD or OSFP/OSFP-RHS PORTS and work status



P/N: 800G QSFP-DD+OSFP CHECKER (ERP Code: 480701021)

P/N: 800G QSFP-DD+OSFP-RHS CHECKER (ERP Code: 480701020)

2. MINI USB and DC Power



I/O Interfaces

Port Type	Quantity	Description
QSFP/QSFP-DD	1	Supports QSFP112/QSFP56/QSFP28 and DD series
OSFP/OSFP-RHS	1	Supports OSFP112/OSFP56/OSFP28 and RHS series
DC 12V Power Input	1	12V DC external power supply
USB 3.0 Type-C	1	For charging the battery module, also can be for data export to external storage devices with USB adapter.

Mechanical Features

Aluminum alloy housing: Excellent heat dissipation, rugged and durable

Tablet flush-mount design: Tablet fixed to top cover, physically isolated from internal space

Optimized airflow path: 2×60×60×25mm active cooling fans

Strap mounting points: Shoulder strap compatible for easy portability

Regulatory Compliance

Gigalight touchscreen 800G QSFP-DD + OSFP/OSFP-RHS Checker meets the requirements of the following standards:

Feature	Standard
Environmental protection	Directive 2011/65/EU with amendment(EU)2015/863
CE EMC	EN55032: 2015 EN55035: 2017 EN61000-3-2:2014 EN61000-3-3:2013
FCC	FCC Part 15, Subpart B ANSI C63.4-2014

References

1. OSFP / QSFP DD MSA
2. IEEE 802.3ck / CEI-112G-VSR



Use of controls or adjustment or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Battery Module Specifications

Parameter	Specification
Capacity	12800mAh/142Wh
DC input	12V/6A
Standard Charging Time	Approx. 6.5 hours
Certifications	UN38.3, CE, RoHS, FCC,CNAS,IEC
Operating Temperature	-20℃ ~ 60℃

Tablet Specifications

Parameter	Specification
Screen Size	10.1-inch FHD (1920×1200)
Touchscreen	10-point capacitive touch, hardened glass
Processor	Intel Celeron N5100
Operating System	Windows 11/10
Memory	8GB
Storage	128GB
Battery Capacity	5000mAh / 7.6V
Protection Rating	IP65, MIL-STD-810G, 1.22m drop resistant
Operating Temperature	-20℃ ~ 60℃

Ordering Information

Part Number	Product Description
800G QSFP-DD+OSFP Touchscreen Checker ERP Code: 480701021	800G/400G/200G PAM4 BERT, QSFP-DD+OSFP ports, with tablet & built-in battery module
800G QSFP-DD+OSFP-RHS Touchscreen Checker	800G/400G/200G PAM4 BERT, QSFP-DD+OSFP-RHS ports, with tablet & built-in battery module

ERP Code: 480701020

Important Notice

Battery Note: Please observe all safety regulations when using, transporting, or storing the lithium-ion battery module. Air transport is subject to local regulations and airline approval.

Thermal Requirements: Ensure ventilation openings are unobstructed during use. Recommended ambient temperature should not exceed 40°C.

Software Updates: Contact Gigalight technical support for GUI software version updates.

Disclaimer: All performance figures, data, and illustrations in this datasheet are typical values for reference only. Specifications are subject to confirmation by Gigalight in writing for specific orders or contracts. Gigalight reserves the right to improve products and change specifications without prior notice.

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Revision History

Revision	Date	Description
V0	Aug-6-2026	Advance Release.