

**Optical Network Transceiver Innovator** 

# 40G/100G QSFP AOC Checker PN:40G/100G QSFP AOC CHECKER

## Features

- 40Gbps, 100Gbps, 112Gbps
  BERT
- QSFP status checker
- Friendly graphic user interface (GUI)
- 2 QSFP ports
- Working independently without PC
- 5V~12V DC power supply
- Smallform &full metal case
- Mini-USB connection

# Applications

- Bit error rate test (PRBS types have four options: PRBS7, PRBS23, PRBS15 and PRBS31, default to PRBS31.)
- QSFP, QSFP+,QSFP AOC/DAC,QSFP+ AOC /DAC test
- Module power measurement
- GUI Operating environment: Win XP,Win 7, Win8 and Win10

## Description

TheQSFPChecker is an instrument which can help you to test QSFP,QSFP+ module ,QSFP AOC,QSFP+ AOC,QSFP DAC,QSFP+ DAC

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 .In addition it can measure the power of the module.

The QSFPChecker combines the Serial PatternGenerator, Bit Error Rate Analyzer. It provides common transmission rate for 40G and 100G.





The friendly graphic user interface (GUI) provides clear monitoring for biterror rate, bit error counter, time, status, power of the module, selection of data rate and PRBS pattern.

## Working mode

1. 40GQSFP+

In this mode, QSFP module, QSFP AOC, QSFP DAC can be tested. Two modules at the same time, one by one,single channel by single channel, all are supported. In addition, you can use two "QSFP Checker" if the AOC or DAC can't be inserted into one QSFP Checker. But in this mode, two QSFP Checkers connected to one PC is not supported.

2. 100G QSFP28, 112G QSFP28

100G QSFP28, 112G QSFP28 are used to test 100G/112G QSFP28 module, AOC, DAC In these two modes, only the QSFP2 Port is used, QSFP1 port is no function include DDM, power measure, read and write EEPROM. Two QSFP Checkers must be used when 100/112G QSFP28 AOC/DAC is tested. You can connect the two QSFP Checkers to two PC.

- 100G QSFP28\_ A, 112G QSFP28\_A These two modes are only used when you connecttwo QSFP Checkerto one PC Otherwise they are no function
- 4. Without PC

The QSFP Checker can working independently. You can choose the work modefrom the GUI and save it to the QSFP Checker (Factory setting is 40G), then the Checker can work as you wanted. The QSFP Checker will not change its working mode even if it is power down, you can get the main message from the four LED, such as working mode, Bit Error test is OK or NG.

## **Typical applications**

40G QSFP Mode: In 40G mode, "Two QSFP Checker-One PC" is not supported Moduletest:



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## AOC or DAC test:

Using one QSFP Checker or Two



# 100/112G QSFP28, 100/112G QSFP28 AOC/DAC Module Test:

Only QSFP2 support 100G/112G, QSFP1 is no function



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## **AOC/DAC Test:**

Use two "QSFP Checker", connected to one PC, TWO PC or without PC, Without PC, you can just know the result(PASS or NG) but no more detail.





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# Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	Vcc	-0.5	16	V
Storage Temperature	Ts	-10	+70	°C

## **Technical Specifications**

Parameter		Symbol	Min	Typical	Max	Unit
Operating Case Temperature	Standard	Тс	-10		+50	°C
Operating Humidity		-	5		85 non-condensing	%
Power Supply Voltag	le	Vcc	5	12	16	V
Physical Dimensions			2000(W)x1400(D) x24(H)			mm

## **Optical and Electrical Characteristics**

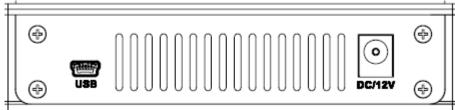
Main Frame			
SFP ports	Standard QSFP 20pin with Cage		
Transmission rate	112Gbps, 100Gbps 40Gbps		
Pattern Generator	PRBS7,PRBS9, PRBS21, PRBS23, PRBS31		
Module Power measured			
supply current	0~3000mA		
Accuracy	±15%		



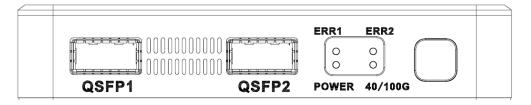
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## Hardware Configuration

### 1. MINI USB and DC Power



## 2. QSFP PORTS and work status



QSFP1: only support 40G(10G single channel) QSFP2: support 40G,100G,112G KEY: Restart testing LED:

- ERR1: Indicates test result of QSFP1, ifany one of the four channels BER(bit error of rate) is not zero, it will be red
- ERR2: Indicates test result of QSFP2, if any one of the four channels BER(bit error of rate) is not zero, it will be red

Power: Power indicator

40/100G: 40G: OFF

- 100G: ON
- 112G: blink

ERR1, ERR2 is no function when the "Checker" is connected to PC

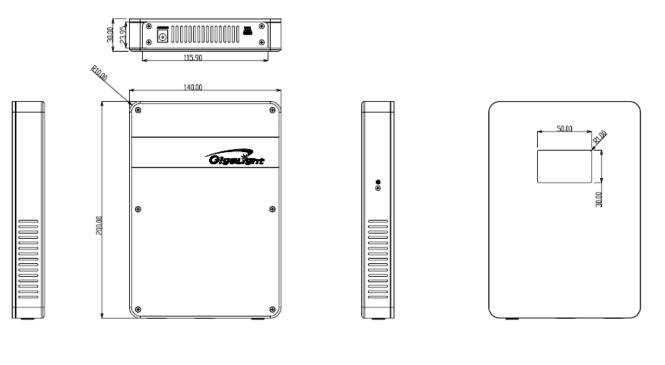
## **Mechanical Dimensions**



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## **Ordering information**

Part Number

40G/100G QSFP AOC CHECKER

### **Product Description**

The QSFP Checker is an test instrument which combines 112Gbps,100Gbps,40Gbps Bit error rate test, DDM Checking, EEPROM coding function, etc.

## **Important Notice**

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