

EM203 Optical Module EMI Test Platform



1. Description

The EM203 Optical Module EMI Test Platform is a test system for qualifying optical modules for Radiated Emissions EMC test compliance. The platform doubles as both a reference signal source for verifying the Radiated Emissions test chamber and a test fixture and variable power supply and state configuration unit for the optical module under test. The platform's modular design enables support for multiple optical module transceiver standards. The test platform is controlled via an easy-to-use command-line interface command set. The command set provides access to all internal optical module transceiver registers, internal temperature regulation, and operating voltage control.

2. Features

- Modular design for multiple standards (QSFP-DD, OSFP, other standards upon request)
- Built-in reference signal source for chamber verification
- Command-line interface controls
- Manual or automatic fan speed control for temperature regulation
- Access to optical module Management Interface registers
- Firmware USB upgradable

3. Applications

- Optical Module Transceiver EMI Qualification Testing

4. Electrical Specifications

EM203 Optical Module EMI Test Platform

Parameter	Value
Supported Standards	QSFP-DD, OSFP
Max Power Consumption	150 W

Reference Source Unit is a device that verifies the EMI evaluation system. It has a fixed radiation frequency and power level and is designed to be used for testing the repeatability of the EMI's measurement setup (across different locations or the same location at different times).

EM203-RS1/2 RF Reference Source Unit – 26.5 GHz/53 GHz

Parameter	Value
Output Frequency	26.5 GHz default, others upon request
Output Power	-40 dBm (Nominal)

Optical Module Test Unit is a modularized, shielded fixture that serves as an interface for the Optical Module under test and the ES203 Optical Module Test EMI Test Platform. When utilized in the ES203 Optical Module EMI Test Platform, all Optical Module Management Interface internal registers are accessible through the system's easy-to-use command-line interface command set.

EM203-OM-QSFP1/2 Optical Module Test Unit – QSFP-DD 400G/800G

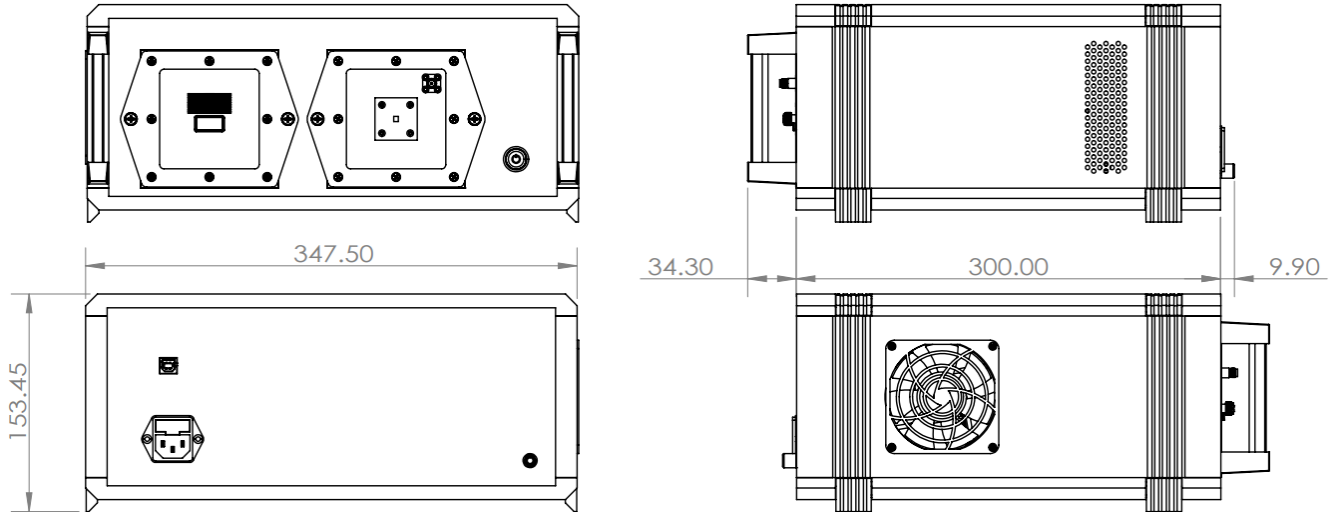
Parameter	Value
Form Factor	QSFP-DD
Max Power Consumption	40 W
Output Voltage Range	2.7 – 3.6 V
Max Output Current	12 A

EM203-OM-OSFP1/2 Optical Module Test Unit – OSFP 400G/800G

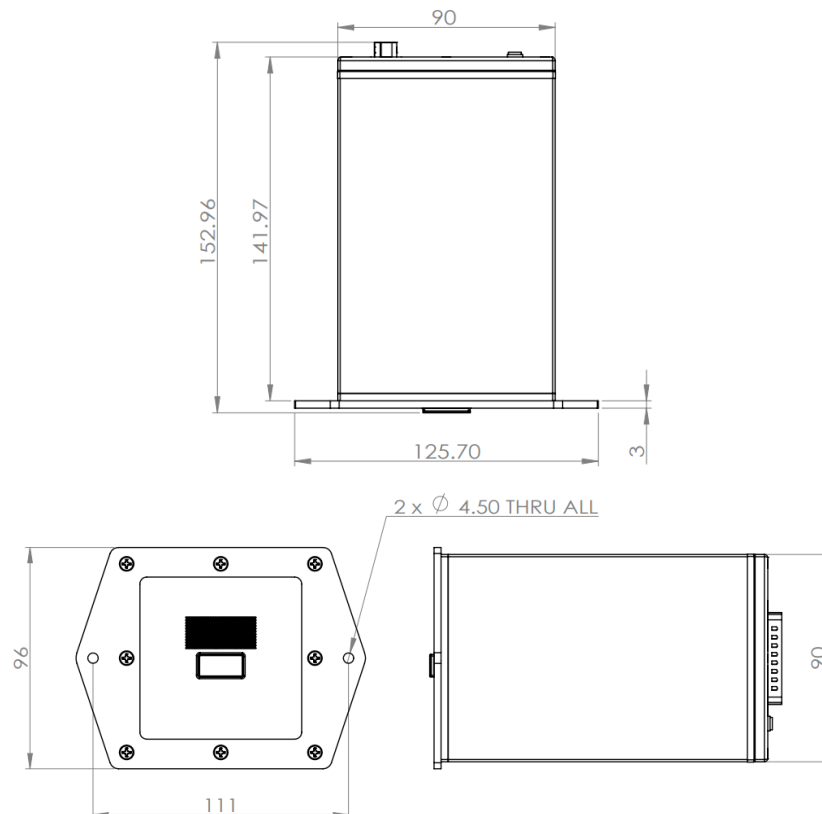
Parameter	Value
Form Factor	OSFP
Max Power Consumption	40 W
Output Voltage Range	2.7 – 3.6 V
Max Output Current	12 A

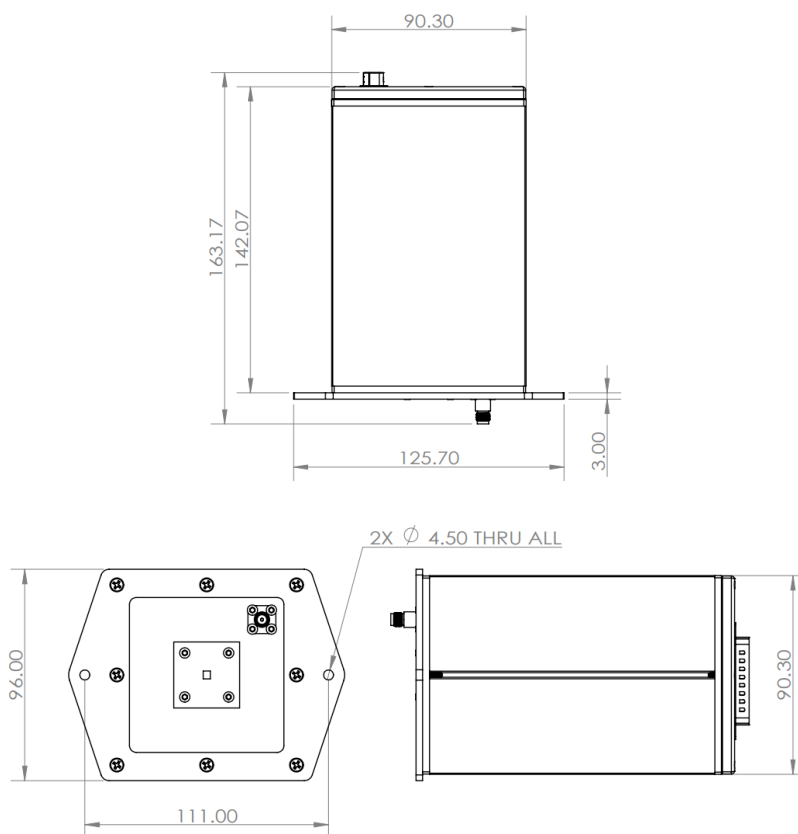
5. Dimensions

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EM203-OM-XXXX Optical Module Test Unit



EM203-RS1/2 RF Reference Source Unit


6. Ordering Information

Line	Part # or Option #	Description	Status
1	EM203	Optical Module Evaluation Platform	Active
2	EM203-RS1	RF Reference Source Unit – 26.5 GHz	Active
3	EM203-OM-QSFP1	Optical Module Test Unit – QSFP-DD 400G	Active
4	EM203-OM-OSFP1	Optical Module Test Unit – OSFP 400G	Active
5	EM203-RS2	RF Reference Source Unit – 26.5 & 53 GHz	Active
6	EM203-OM-QSFP2	Optical Module Test Unit – QSFP-DD 800G	Active
7	EM203-OM-OSFP2	Optical Module Test Unit – OSFP 800G	Active