

# **STD-MOE Hardware Manual**

## **Version 1.0**

### **February/2017**

**Beam Diagnostics Group (DIG)**  
**Brazilian Synchrotron Light Laboratory (LNLS)**  
**Brazilian Center for Research in Energy and Materials (CNPem)**

## About this manual

This manual is intended for people who need information about the STD-MOE hardware. Information about the timing system structure and operation, firmware, or software can be found in the corresponding manuals.

## Contents

<b>1</b>	<b>Hardware Specification</b>	<b>2</b>
<b>2</b>	<b>STD-MOE Hardware Functions</b>	<b>2</b>

## 1 Hardware Specification

STD-MOE is a 19 inches 1U module.  
110/220V 50/60Hz AC power supply.

Figure 1: STD-MOE



Table 1: STD-MOE front panel connectors

Connector	Type	Description / Specification
OUT1 - OUT4	BNC	Outputs of Channel 0 - 3 5.0V TTL level
OE1 - OE4	LC Duplex	Fiber uplink of Channel 0 - 3

Table 2: STD-MOE front panel leds

LED	Type	Description / Specification
LINK0	Yellow LED	(On) Uplink established (Blink) Trigger output
LINK1	Yellow LED	(On) Uplink established (Blink) Trigger output
LINK2	Yellow LED	(On) Uplink established (Blink) Trigger output
LINK3	Yellow LED	(On) Uplink established (Blink) Trigger output

## 2 STD-MOE Hardware Functions

The STD-MOE is an Optical to Electrical converter used for converting Timing System triggers. The module has 4 LC Duplex connectors (OE1 - OE4) in the front panel. The optical inputs are converted to 5V TTL level electrical signals, which are output in the corresponding BNC connectors (OUT1 - OUT4).