



SOE 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 SOE hardware. Information about the timing system structure and operation, firmware, or software can be found in the corresponding manuals.

Contents

1	Hardware Specification	2
2	SOE Hardware Functions	2

1 Hardware Specification

SOE is a standalone module. 18 - 36V DC power supply.

Figure 1: SOE





Table 1: SOE front panel connectors

Connector	Туре	Description / Specification
IN	HFBR-4531/4532	Optical Input (Agilent HFBR-2528)
OUT	BNC	Outputs (5.0V TTL level)

Table 2: SOE front panel leds

LED	Type	Description / Specification
PWR	Green LED	Power on
TRIGGER	Yellow LED	(Blink) Trigger output

Table 3: SOE rear panel connectors

Connector	Type	Description / Specification
PWR	LEMO.EXG.1B.304.HLN	Power supply
		18 - 36V DC

2 SOE Hardware Functions

The SOE is a standalone Optical to Electrical converter used for converting the Timing System triggers. The module has 1 Plastic Optical Fiber input (IN) in the front panel. The input signal is converted to a 5V TTL level electrical signal available in the BNC OUT output.