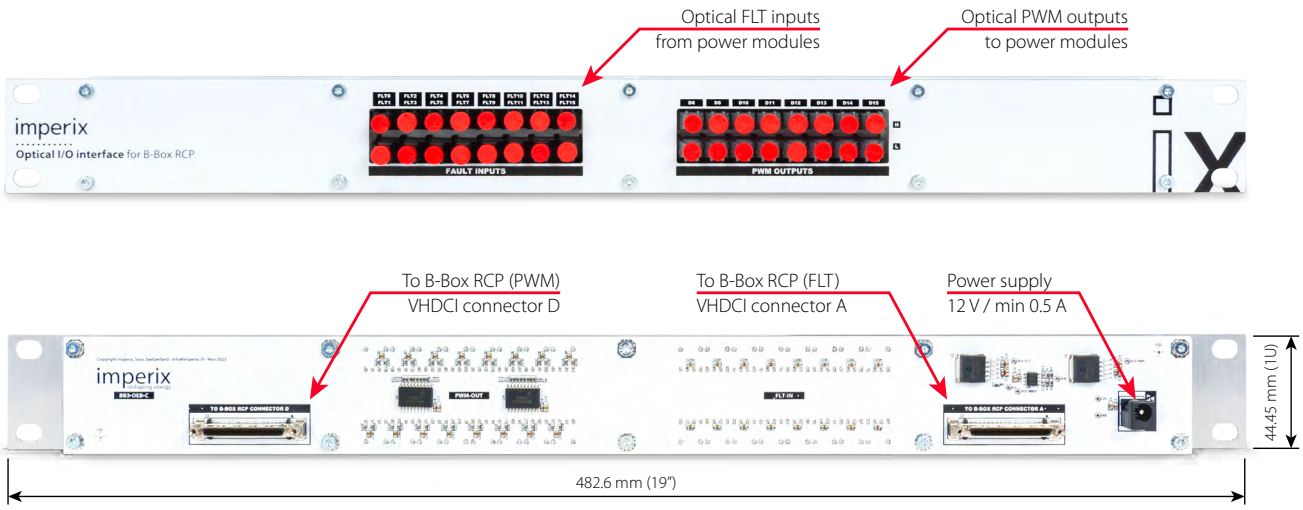
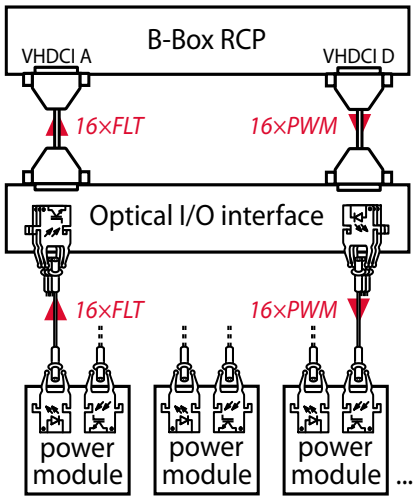


GENERAL DESCRIPTION

The optical expansion board converts the electrical signals from the VHDCI connectors on the rear side of the **B-Box RCP** to **optical** signals. It allows access to the 16 fault inputs and the 16 PWM outputs through optical fibers. The fault inputs are available on the VHDCI connector A and the PWM outputs on VHDCI connector D.

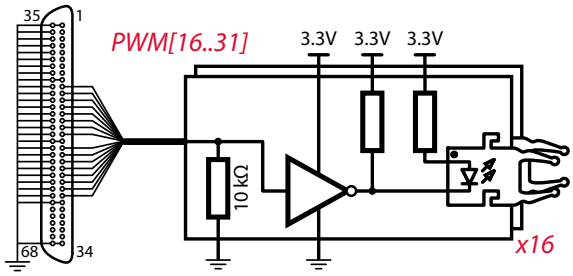
This way, one single B-Box RCP in combination with the optical expansion can control up to 8 NPC control legs, 8 full-bridge modules (4 PWM signals per module), or 16 half-bridge modules (2 PWM signals per module).



The optical expansion board is supplied by the external power adapter WSX120-2000 (12 V / 2 A). The power adapter and the two required VHDCI cables are delivered with the optical expansion board.

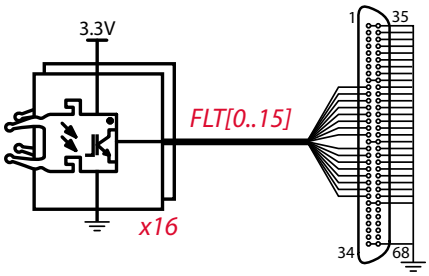
PWM OUTPUTS

- 16 PWM signals
- PWM channels #8 to #15 mapped to lanes #16 to #31
- Max. prop delay difference between 2 channels: 80 ns
- Optical fiber wiring of the gating signals to imperix PEB/PEH/PEN power modules



FAULT INPUTS

- 16 Fault signals (#0 to #15)
- Max. prop delay difference between 2 channels: 80 ns
- Optical fiber wiring of fault outputs from imperix PEB/PEH/PEN modules
- Configurable as general-purpose inputs as well



CONTACT

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ABOUT US

Imperix develops high-end control equipment and prototyping hardware for power electronics, drives, smart grids and related topics. Its products are designed to accelerate the implementation of laboratory-scale power converters and facilitate the derivation of high quality experimental results.