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Simulator interface – For RT Box hardware

Analog outputs
RJ45 connectors

Digital inputs
Optical fibers

Analog outputs
test points

Digital inputs
test points

To OPAL digital inputs
DB-37 connector

To OPAL analog outputs
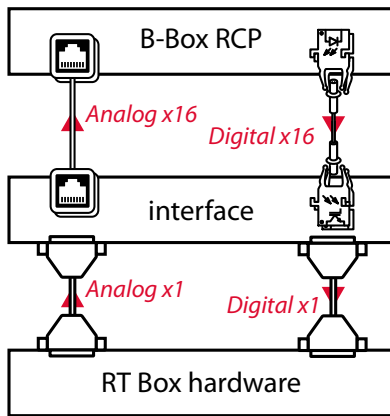DB-37 connector

44.45 mm (1U)
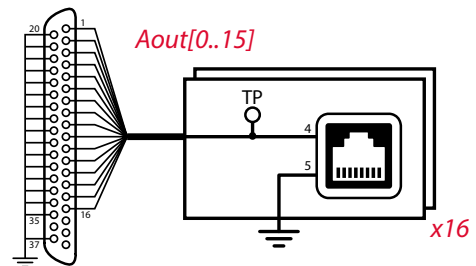
428.6 mm

GENERAL DESCRIPTION

This interface interconnects the **B-Box RCP** controller to an **RT Box** HIL simulator.

This way, any control implementation can be first tested – without any risk – on a simulated converter; before it is later tested on real hardware. In this second step, all cables can be instantly swapped from the interface to the real converter.
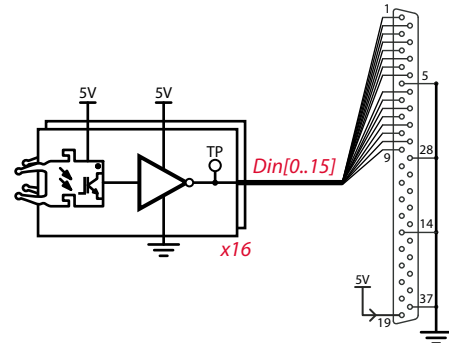

B-Box RCP

Analog x16

Digital x16

interface

Analog x1

Digital x1

RT Box hardware

ANALOG OUTPUTS

– 16 channels, RJ45 connectors
– To be wired to analog inputs of the B-Box RCP
– -10 to 10V voltage range

Aout[0..15]

TP

x16

DIGITAL INPUTS

– 16 independent channels
– Optical fiber wiring to digital outputs of the B-Box RCP
– Max. prop. delay difference between 2 channels: 80 ns
– 5V supplied directly by the RT Box HIL Simulator

Din[0..15]

x16

CONTACT

Imperix Ltd.
Rue de la Dixence 10, 1950 Sion, Switzerland
imperix.com, sales@imperix.com

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.