

राष्ट्रीय प्रौद्योगिकीसंस्थान, उत्तराखण्ड
NATIONAL INSTITUTE OF TECHNOLOGY, UTTARAKHAND

Ref.No.: NITUK/TEQIP-III/Procurement/2019/17/(XXXII)/1811

Date:13.12.2019

ORDER TO BE PLACED UNDER PROPRIETARY CERTIFICATE

National Institute of Technology, Uttarakhand is going to place order for following software under proprietary article basis. Objection(s) if any, in this regard are called upon at teqipthird@nituk.ac.in from party/organization latest by the 06/01/2020 before 04:30 PM.

In case of no objection received from any firm/agency on or before the above mentioned date and time, then order will be placed as under:

S. No.	Item	Party (Proprietary)	Sole Authorized Distributor in India authorized to quote/sale/supply the item on behalf of OEM to the Institute doing the procurement or the jurisdiction of area covered	Qty.	Specifications
1.	OPAL-RT Real Time HIL Simulator & HIL Controller	OPAL-RT Technologies Inc. 1751 Richardson, Suite 2525, Montréal, Québec, Canada	OPAL-RT Technologies India Pvt. Ltd. 648/A, OHM Chambers, 2 nd Floor, 100ft Road, Binnamangala, Indiranagar, 2 nd Stage, Bangalore-560038 gagan@opal-rt.com 91-9818277887,	01	enclosed

Sd/-
Coordinator (TEQIP-III)

Encl:

1. Copy of Specification
2. Copy of OEM certificate(s)

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Specifications

S. No.	Item Name	Specifications
1.	Opal-RT Real Time Digital HIL Simulator for Power System, Power Electronics, Machines & Drives Applications. Model No: OP4510	Simulator Hardware :- Chassis : 2U CPU Core : Intel Xeon E3 4 Core ,3.2 GHz, FPGA Core : Xilinx Kintex7 325T,326000 logic cells,-840 DSP Slice, Analog input card (16 channels,500 kS/s, 16 bits, ±20 V), Analog output card (16 channels,1MS/s, 16 bits, ±16 V,10mA) , Digital input card (32 channels, optocouplers, 4.5 V to 50 V, 40 ns,3.5mA) , Digital output card (32 channels, push-pull, 5 V to 30 V, 200 ns to 65 ns,50mA) Simulator Software :- Linus OS with Real-Time Kernel , Intel C++ Compiler FPGA IP Digital I/O License RT-LAB 11.x Host/Workstation License - Professional RT-LAB 11.x Real-Time Target License – Professional
2.	HIL Controller Interface (OP8662)	Hardware in Loop (HIL) Platform for HIL Applications: HIL Controller Interface unit consisting of 8 high current and 8 high voltage probes with signal conditioning & cables) (Hardware-in-the-loop Interface / Data Acquisition Interface) It can intake upto 600 V and give an output of 0-30V so that live voltage can be taken inside the simulator and provided to the model / controller logic being implemented inside the simulator.



ORIGINAL EQUIPMENT MANUFACTURER (OEM) CERTIFICATE AND PROPRIETARY CERTIFICATE
TO WHOMSOEVER IT MAY CONCERN

RT-Lab[®], eDRIVEsim[®], eMEGAsim[®], ePHASORsim[®], RT-LAB BERTA[®], Artemis Real Time Solver, Artemis SSN , RT Events Blockset, eHS FPGA Solver, RTE Drive Blockset , Communication Protocols – IEC 61850, IEC 60870-5-104 ,IEC 61850-9-2, DNP3, C37.118,Modbus, Time synchronization kit, Quad Port Ethernet Server Adapter, Analog I/O cards, Digital I/O Cards, BNC to Mini BNC Cables, DB37 Screw terminals etc, OP4200[®], OP4510[®], OP5700[®], OP5600[®], OP6000[®] & OP7000[®] are Solely manufactured by Opal-RT Technologies, Montreal, Canada. Along with these, we also Solely manufacture various other hardware Interfaces like Grid Simulator,Power Amplifier, OP8662 HIL Platform / Controller Interface, OP5511, RT-Lab HMI, PMU Prototyping Platform, Motor Drive Lab Kit, Signal Break Out Boxes, Solar PV Emulator ,DFIG & PMSG Based Wind Emulator, Hydro Emulator,Mapping Boxes etc. Also Hydro Quebec's Hypersim[®] Software is commercialized only by Opal-RT exclusively across the world & Opal-RT has the exclusive mandate to develop and support it world-wide.

We certify and confirm that all *the above products are proprietary items of*

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Only Opal-RT India office is authorized to sell all the above Products in India. The India Office is situated at

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Please visit <http://www.opal-rt.com/company/contactus.html> for absolute confirmation.

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