

INTRODUCING

NovaCor Light



A lightweight alternative
for heavyweight innovation.

A NEW LIGHTWEIGHT SIMULATION HARDWARE OPTION FROM RTDS TECHNOLOGIES

NovaCor™ Light is the latest simulation hardware option for the RTDS® Simulator. Aimed at entry-level projects with options for easy expansion, NovaCor Light improves access to world-class real-time simulation and hardware-in-the-loop testing while maintaining the quality of design, service, and support that the RTDS Simulator is known for worldwide. Providing value without compromising on quality, NovaCor Light is your gateway to innovation in the power industry.

SIMULATION CAPABILITIES

NovaCor Light is based on a multicore processor; scaling is accomplished via core licensing. The minimum configuration includes one core license, and **up to four cores can be licensed per chassis**.

NETWORK SIZE AND COMPLEXITY

- **Single Core** – When a single core is licensed, it accommodates a 54 node network solution together with power and control system components. See Hardware Allocation Examples.
- **Multiple Cores** – When multiple cores are licensed, one core can be dedicated for a 180 node network solution with power and control system components modelled on other cores. See Hardware Allocation Examples.

NovaCor Light supports Distribution Mode, TSA Mode, and the Superstep and Substep simulation environments. When running a Substep subnetwork on a dedicated core, 36 single-phase nodes can be accommodated.

See our **Hardware Allocation Examples** for examples of circuits that can run on NovaCor Light.

FRONT OF CHASSIS



Dimensions: 48.3 x 52.2 x 17.8 cm (W x D x H)

Scalability: Up to 4 licensed cores per chassis
Up to 4 interconnected chassis

Compatibility: RSCAD® FX
All current-generation I/O cards
NovaCor 1.0 and 2.0 chassis

REAR OF CHASSIS



Built-in I/O: 12 x analogue in + out, 32 x digital in + out

4 x fibre ports for additional I/O connections

2 x fibre ports for optional Aurora protocol licensing

3 x fibre ports for connection to other NovaCor + NovaCor Light units

1 x GTSYNC fibre port for optional GPS synchronization

1 x RJ45 UDP port for data logging or co-simulation

1 x Ethernet port for workstation connection



HARDWARE FEATURES, CONNECTIVITY, AND COMPATIBILITY

NovaCor Light has the same form factor as our NovaCor 1.0/2.0 hardware generations; it's a 4U chassis that can be used as a standalone tabletop unit or mounted in a cubicle. Each NovaCor Light chassis includes the following **built-in, internal I/O** to enable hardware-in-the-loop testing.

BUILT-IN I/O FOR CONNECTING TO EXTERNAL DEVICES

- 32 x digital inputs, 32 x digital outputs
- 12 x analogue inputs, 12 x analogue outputs
- 2 x optional Aurora protocol communication ports
- 1 x RJ45 UDP port for data logging or co-simulation

NovaCor Light also includes 4 fibre ports for connecting to additional I/O, and is **compatible with all current-generation RTDS Simulator I/O cards**, including the GTSOC V2 and GTNETx2. Multiple I/O cards can be daisy-chained from a single fibre port, so hundreds of I/O channels can be accommodated if needed.

NovaCor Light includes GBH and IRC ports for connecting to other NovaCor Light units in order to expand the simulation. NovaCor Light can also be connected to NovaCor 1.0/2.0. When working with NovaCor Light, **up to four units can be interconnected in total**.

RSCAD FX: THE SAME WORLD-CLASS SIMULATION SOFTWARE

NovaCor Light integrates with the RSCAD FX simulation software. RSCAD FX is an all-in-one software package, containing all available modelling libraries and features. RSCAD FX is provided via a site license, meaning there is no limit to the number of users at a given organization.

With fast compile times, unlimited seats, and access to all libraries and applications, NovaCor Light and RSCAD FX are designed to facilitate efficient and flexible innovation.

Apply NovaCor Light to our complete range of applications, including power electronics • HVDC + FACTS • protection + automation renewable energy • transmission + distribution • IEC 61850 • and more...



ONGOING SUPPORT: GETTING THE MOST OUT OF NOVACOR LIGHT

NovaCor Light includes our comprehensive video training package to get you started with the technology, plus one year of our warranty and maintenance program on hardware and software. For an annual fee, extended coverage on hardware (repair/replacement with no deductible) and software (simulation support and access to software updates) is available.

For non-commercial users such as universities, perpetual extended software support is always free. That means unlimited access to our simulation support team and all available software updates - so you'll always have the latest and greatest models and features for NovaCor Light.

Learn more at rtds.com/novacorlight.