

# K-SERIES

HIGH-POWER KLYSTRON-BASED RF SYSTEMS



### Optimize your uptime and performance

ScandiNova's wide range of RF systems with unique solid-state technology has raised our customers' applications to new levels of reliability and precision.

Compact devices reduce the need for space, save costs and increase opportunities.

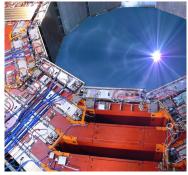
Moreover, easy installation and reduced operational costs lower the overall cost of ownership.

Today our systems power the world's most powerful particle accelerators.







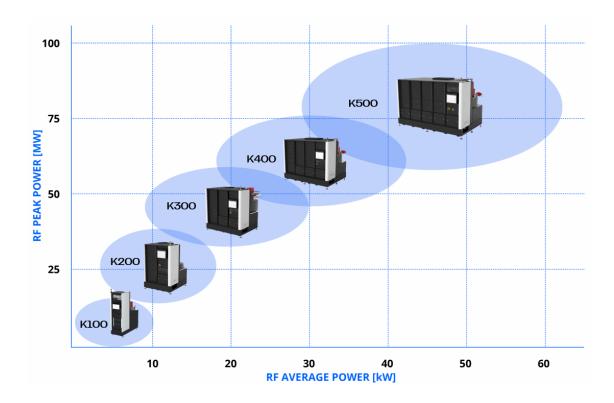


# EASILY SCALABLE AND ADAPTABLE SYSTEMS

## for many kinds of loads and demands

**Thanks to our modular design**, we can offer systems that handle a wide range of loads and needs all the way to a RF peak power level of 100 MW! We take care of everything, including integrating the klystron, cooling system and low-level RF. Our modern distributed control system connects modules and sensors via a standardized communication protocol.

The solid-state pulse modulator developed by ScandiNova forms the basis in all of these systems. Each has a flexible range of peak/average power. Your choice is based on power levels and the level of RF integration. Regardless of configuration, you enjoy state-of-the-art technology and ScandiNova's high-end control system.



### **RELIABLE**

ScandiNova's solid-state technology provides the highest level of reliability and maximizes up time.

### **COMPACT**

The systems require about one third of the space and have about 30% higher efficiency than traditional systems.

### **PRECISE**

Unique split-core technology breakthroughs generate unrivalled pulse-to-pulse stability at ppm levels.

# FROM A PURE HIGH VOLTAGE PULSE MODULATOR ALL THE WAY TO A TURN-KEY RF SYSTEM

ScandiNova has the capability to offer a complete optimized RF system. The integration of subsystems and components is made with the skills earned through our background in the accelerator industry. Our well established collaboration with leading suppliers secures a robust solution that meets high market demands.

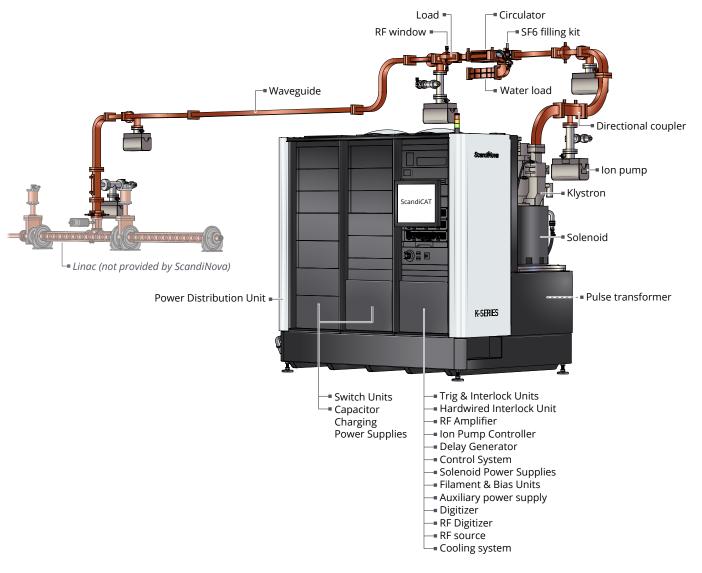


Figure: Example of ScandiNova RF system for high-power RF generation, showing key components and waveguides connected to the linac.



### PULSE CONTROL LEADS TO NEW POSSIBILITIES

ScandiNova's modern control system offers both a user-friendly interface and a wide range of different shape modifications for every pulse.

Length, amplitude and frequency can be changed, giving end-users new possibilities and features not previously possible.

### SAFETY FIRST

The split-core concept has minimized the risks for personal and collateral damages. High voltage components are kept to a minimum and all are placed inside the oil tank. Each modulator has several protections against arcs to safeguard the klystron.

By reducing the primary voltage from 30,000 V to 1000 V, ScandiNova systems can implement much better covers and protection, thereby eliminating the risk of electrical shocks.

#### CONTACT

Tel: +46 (0)18 480 59 00 E-mail: info@scandinovasystems.com

### **HEADQUARTERS**

ScandiNova Systems AB
Typsnittsgatan 15
SE-754 54 Uppsala, Sweden

### VISIT OUR WEBSITE

www.scandinovasystems.com

