

AFTER SALES

Patrik Viklund – After Sales Manager

After Sales

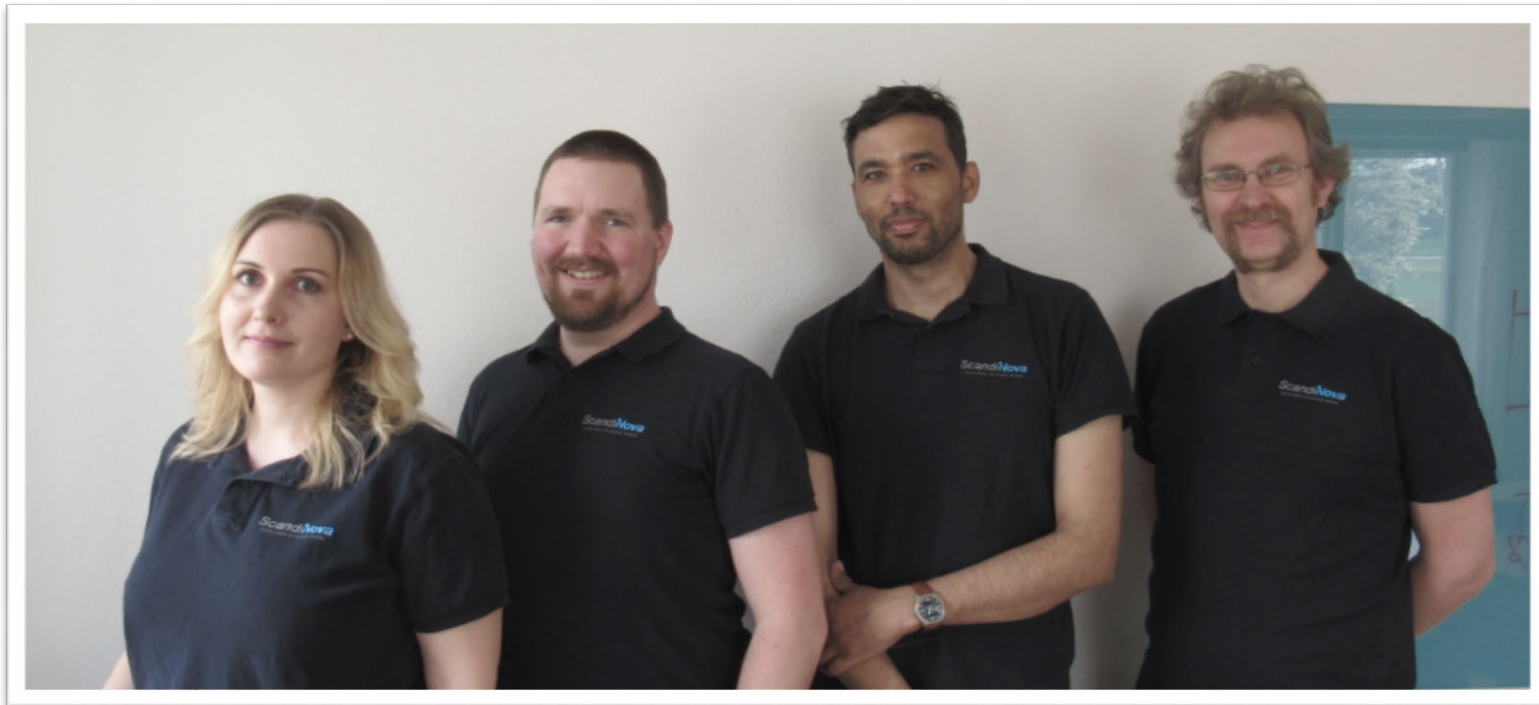
OFFERS

- Service Contracts
- Remote Support
- Spare Parts
- Repair
- Field Service



After Sales TEAM

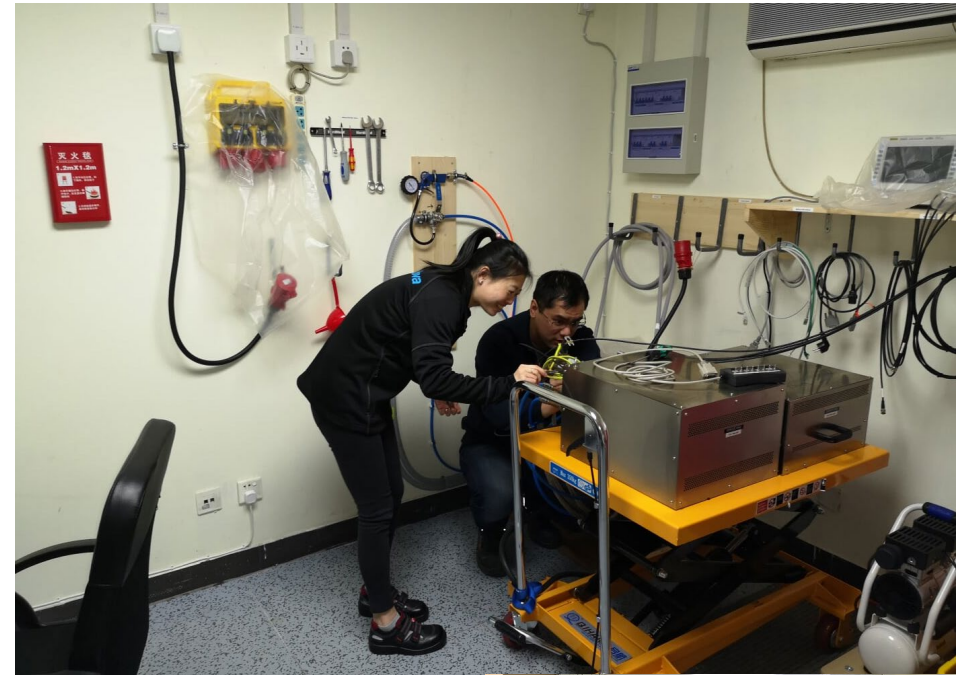
- Charlotte Kallin
Logistics Administrator
- Patrik Viklund
After Sales Manager
- Sami Ayed
Repair Engineer
- Andreas Sandgren
Field Service Engineer



After Sales

BEIJING SERVICE CENTER

- 40 m², Haidan District, Beijing China.
- Installed end of October 2019
- Manned by Swedish staff when needed. (After travel restrictions are lifted)
- Robert Shen (tr), CEO Tangram, is our brilliant host.



After Sales

SERVICE CONTRACTS



Nova™

Consumables:



Spare parts, discount:

✓ 5%

Remote Support:

✓ 24/7

Maintenance and training:



Emergency visits:



Nova Plus™

Consumables:



Spare parts, discount:

✓ 10% in stock

Remote Support:

✓ 24/7

Maintenance and training:



Emergency visits:



Nova Premium™

Consumables:



Spare parts at customer site:



Remote Support:

✓ 24/7

Maintenance and training:



Emergency visits:



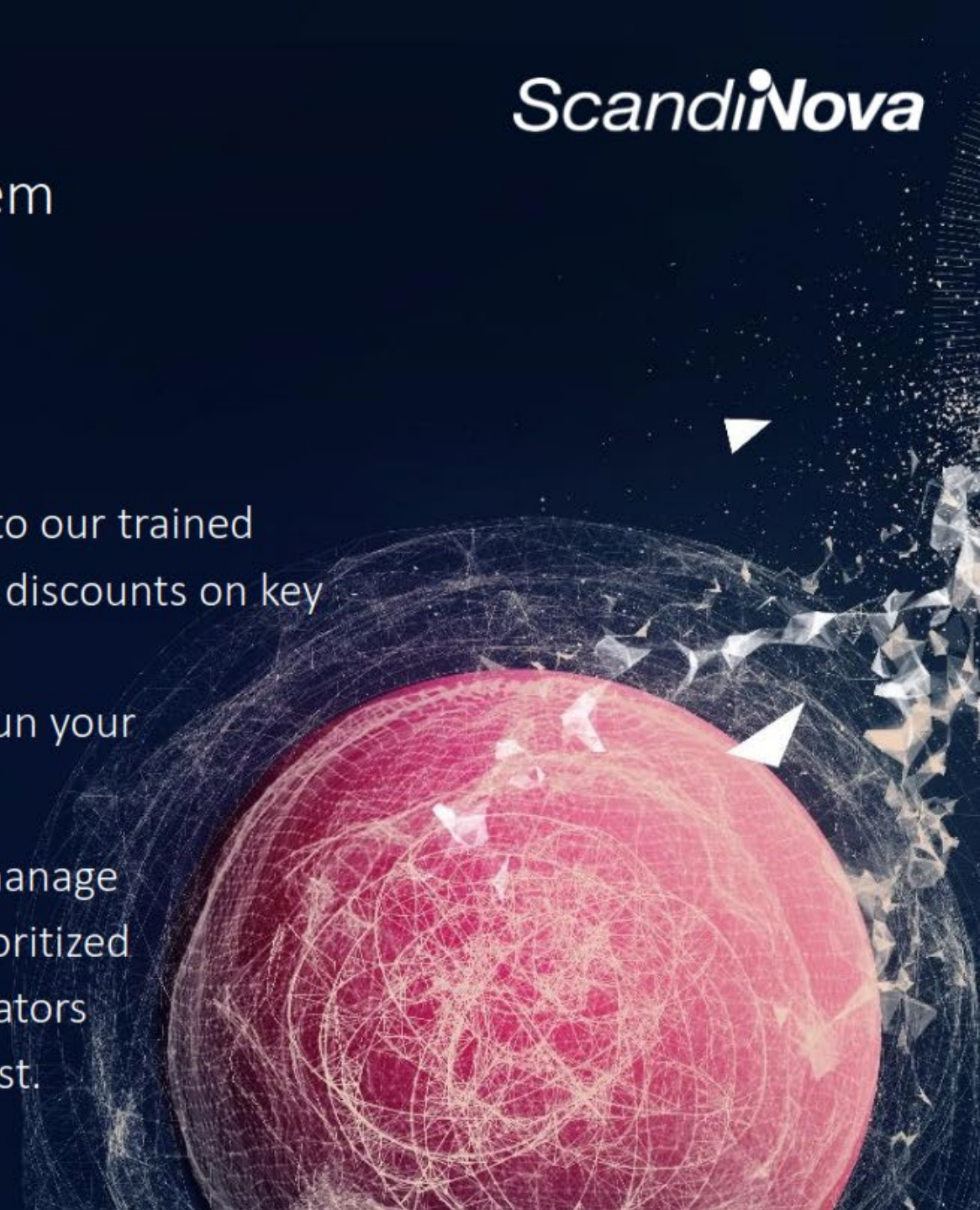
NOVA™

ScandiNova

A service offer for your pulsed power system

Nova™ is our basic service agreement, securing access to our trained service experts when unforeseen issues occur, as well as discounts on key spare parts. Consumables are also included, to extend the lifetime of your pulsed power system and help you run your business without unwelcome repair costs.

This service agreement is designed for customers who manage their own maintenance, but still want the security of prioritized help when necessary. Remote connectivity in our modulators enables online troubleshooting, saving both time and cost.





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INCLUDED IN NOVA™

Consumables

Consumable parts used for annual maintenance of your pulsed power system will be supplied and delivered to your site once a year. Replacement of consumables will be performed by the Contract Holder.

Spare parts

If Spare parts are needed, ScandiNova will supply the contract holder with those parts with a 5% discount.

Remote support

Access to ScandiNova's Support functions (remote desktop, telephone and e-mail) at extended office hours
00:00-24:00, Mon-Sun,
excluding Swedish national Holidays
Response within 3 hours

NOVA PLUS™

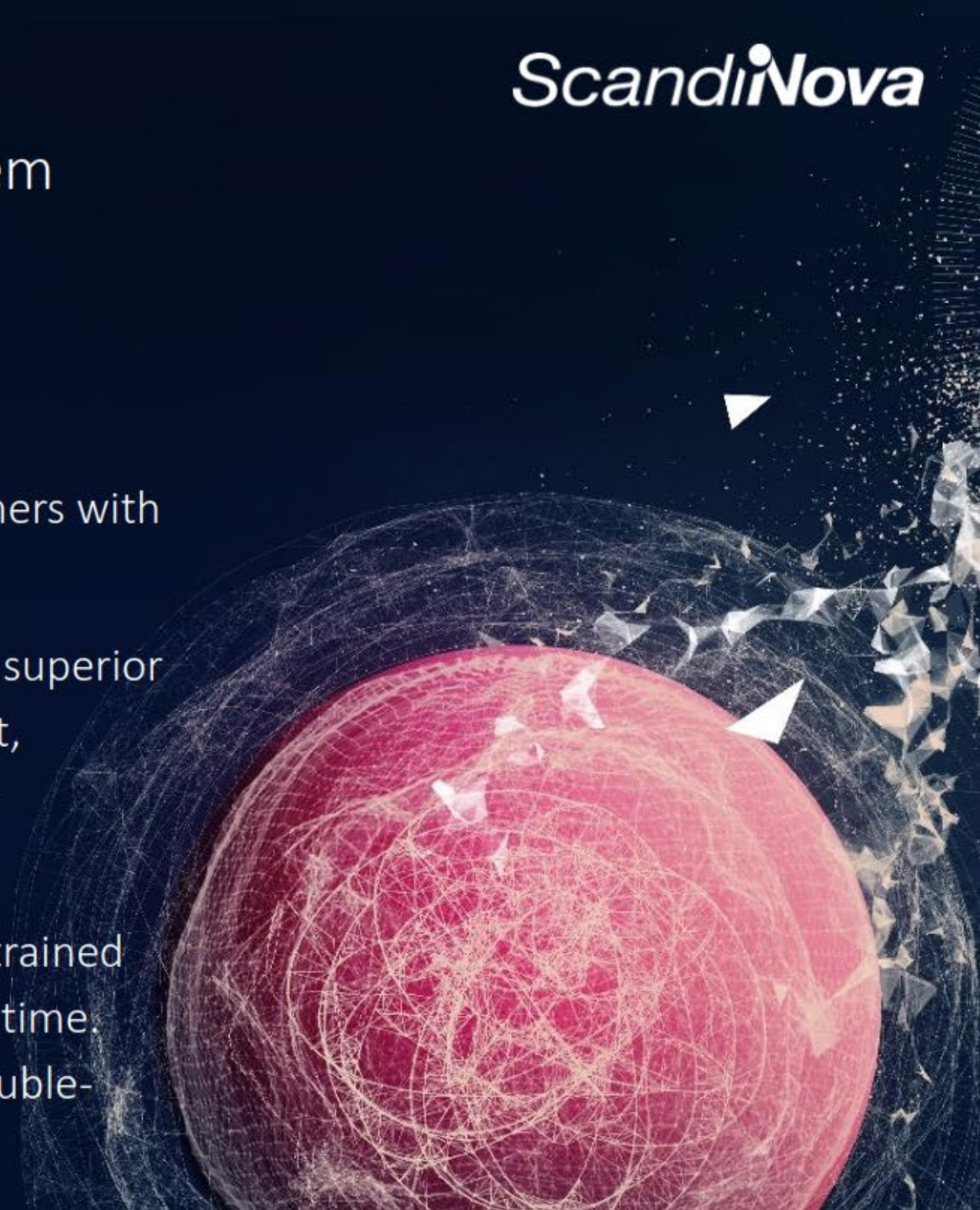
ScandiNova

A service offer for your pulsed power system

Nova Plus™ is a service agreement designed for customers with high demands for uptime, quality and cost control.

This service agreement offers maintenance and training, superior support access and spare parts on demand with discount, extending the lifetime of your investment with sustained performance.

Nova Plus™ gives you prioritized access to ScandiNova's trained service and support technicians, saving both money and time. Remote connectivity in our modulators enables us to troubleshoot your system online, further reducing downtime.



After Sales

INCLUDED IN NOVA PLUS™

Consumables

Once per year, consumable parts will be replaced by ScandiNova at the time of the Maintenance Visit.

Spare parts on demand

Parts upon request with a 10% discount.

Remote support 24/7

Access to ScandiNova's Support functions (remote desktop, telephone and e-mail) at extended office hours

00:00-24:00, Mon-Sun,

excluding Swedish national Holidays

Response within 1 hour

Maintenance and Training

Maintenance program on-site 1 time/ year

During the maintenance an overall checkup of the system and its components will be performed as well as replacement of consumables and preventive actions. Training for your operators and maintenance staff, Performed on site during maintenance

Emergency visits

Site service on-call in case of emergency breakdown of contracted equipment

Start of travel within 48 h from request

Cost per visit predefined in contract

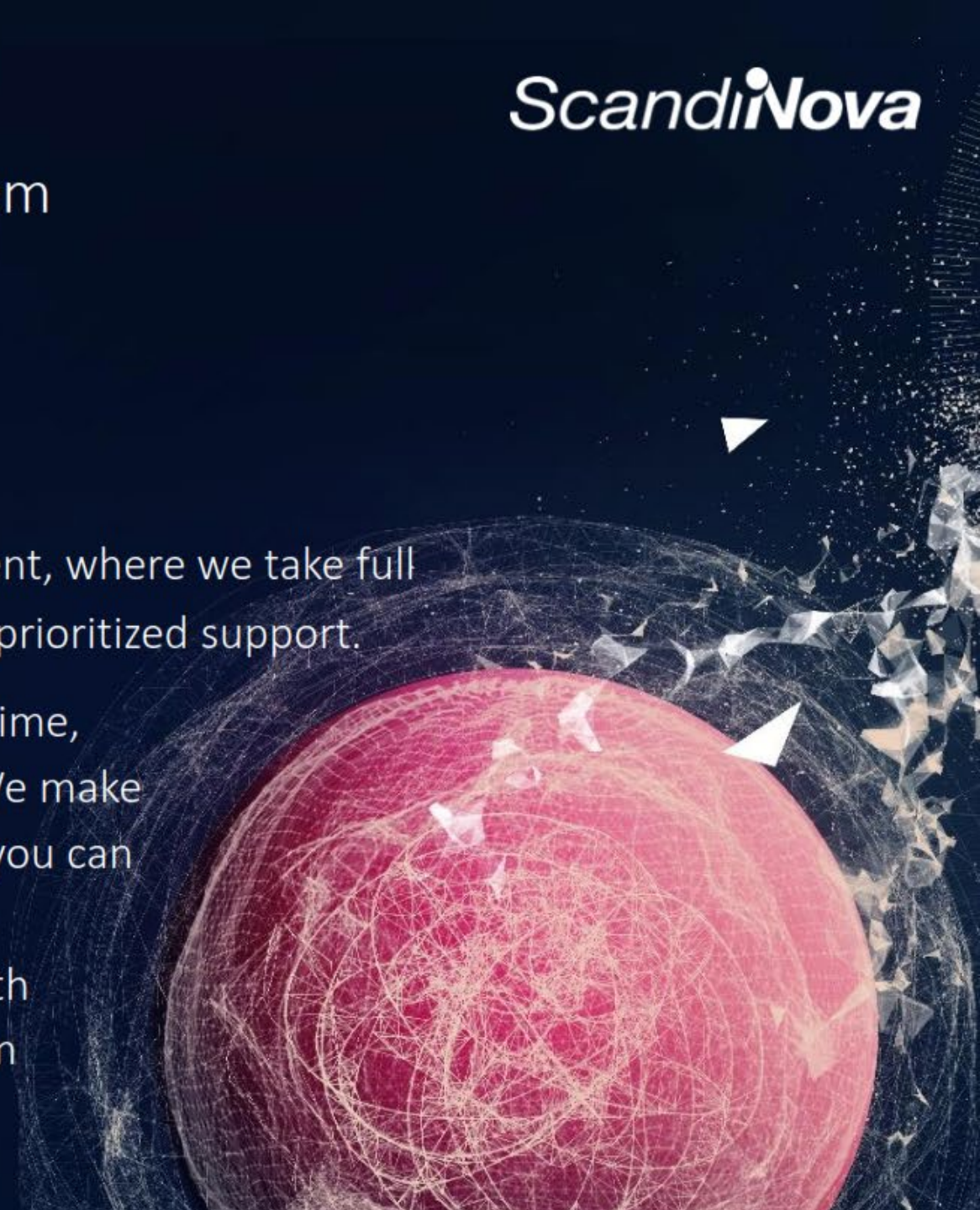
NOVA PREMIUM™

A service offer for your pulsed power system

ScandiNova

Nova Premium™ is indeed a premium service agreement, where we take full responsibility for service, maintenance and repairs, with prioritized support.

This is the perfect choice for applications where high uptime, consistent product quality and cost control are crucial. We make sure that your system is always in top condition, so that you can focus on your core business. Remote connectivity in our modulators enables us to troubleshoot online, saving both time and cost. This is a prerequisite for signing a Premium Agreement.



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INCLUDED IN PREMIUM

Consumables

Once per year, consumable parts will be replaced by ScandiNova at the time of the Maintenance Visit.

Spare parts on site

To maximize up-time, ScandiNova will supply the contract holder with necessary spare parts to be stored at site. The costs for the spare part kit will be defined in the agreement.

Remote support 24/7

Access to ScandiNova's Support functions (remote desktop, telephone and e-mail) at extended office hours

00:00-24:00, Mon-Sun,
excluding Swedish national Holidays

Response within 1 hour

Maintenance and Training

Maintenance program on-site 2 times/ year

During the maintenance an overall checkup of the system and its components will be performed as well as replacement of consumables and preventive actions. Training for your operators and maintenance staff, Performed on site during maintenance

Emergency visits

Site service on-call in case of emergency breakdown of contracted equipment

Start of travel within 24 h from request

Cost per visit predefined in contract



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REMOTE SUPPORT

- Remote Control
 - Requires Internet connection to modulator
 - TeamViewer connects ScandiNova to modulator GUI
 - Operator required to be on site for safety and to report additional requested information
- E-mail support
 - Detailed fault description
 - Photos and Videos
- Telephone

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SPARE PARTS

- FRU – Field Replaceable Unit
 - Complete Subunit ready made for replacement
 - Built to order
- Cables
- Consumables
 - Air filters
 - Oil filters





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REPAIRS

- RMA – Return Merchandise Authorization Procedure
 - Request Repair of Unit
 - ScandiNova issues a repair order with RMA-number
 - Return Unit to ScandiNova
 - ScandiNova trouble shoots and repairs the unit
 - Reports findings and final cost
 - Unit is returned

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FIELD SERVICE

- Preventive Maintenance
- On-Site trouble shooting and repair
- Maintenance Training
 - Maintenance procedure
 - Measurements & Calibrations
 - Replacement of FRUs



A decorative graphic on the left side of the slide, consisting of a network of interconnected nodes and lines, resembling a molecular structure or a complex web. The nodes are small circles, and the lines are thin, connecting the nodes in a non-linear fashion. The overall shape is somewhat vertical and tapers towards the bottom.

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SUPPORT REQUEST

- Send all requests for Support, Spare Parts and Service to
 - support@scandinovasystems.com
 - This is our shared mailbox that reaches the whole team.
 - Ensures your inquiry reaches the right person



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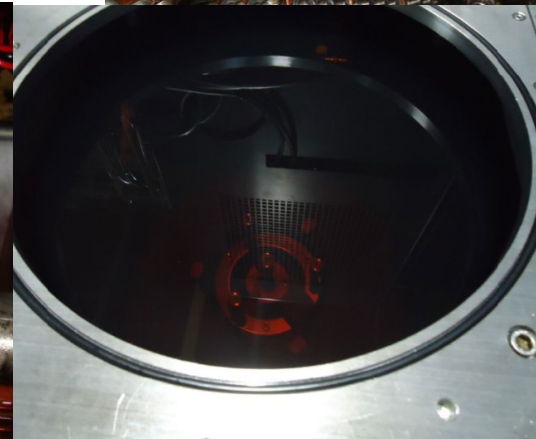
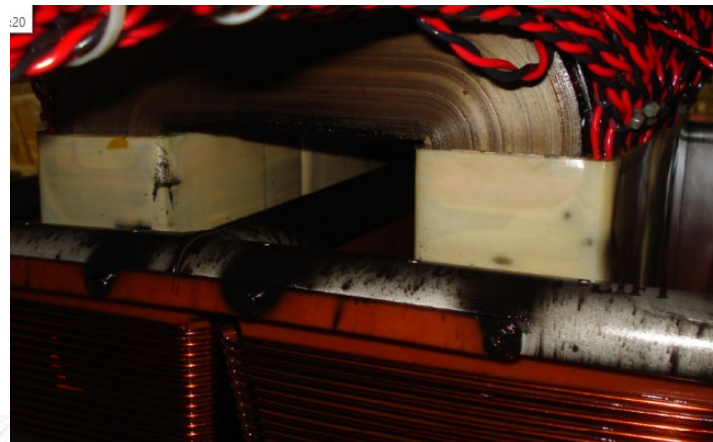
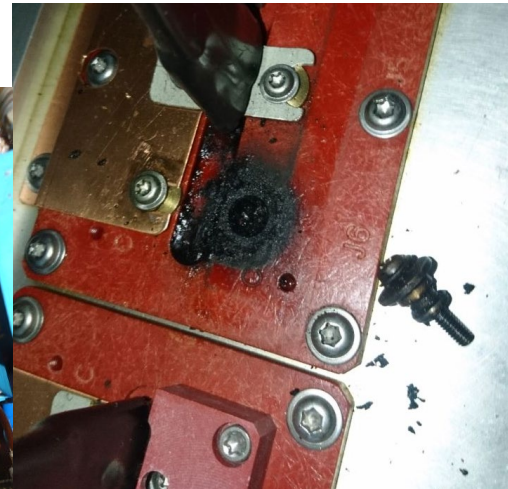
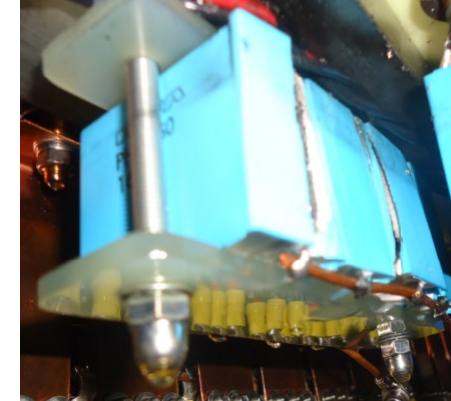
PREVENTIVE MAINTENANCE

- Replace Consumables
 - Oil filter (K-Series)
 - Air filters
- Tighten electrical connections
 - Primary Connectors
 - Mains
 - Tunings
- Check Calibration of signals
- Check oil quality

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PREVENTIVE MAINTENANCE

- Failures that can be avoided through maintenance
 - Burned connectors
 - Burned tunings
 - Broken subunits
 - Transformer tank Arcings
 - Oil leaks



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PREVENTIVE MAINTENANCE

	Description	6 months	12 months
	CCPS		
	Check DC voltage, from GUI, calibrate if >1% deviation	X	X
	Visually inspect DC bus cables for damages on insulation and connectors	X	X
	Check screw terminal connections and tighten if necessary	X	X
	SU		
	Visually inspect Primary Pulse cables for damages on insulation and connectors	X	
	Check primary pulses at driver board		X
	Check screw terminal connections and tighten if necessary	X	X
	TANK		
	Visually inspect primary pulse cables for damages on insulation and connectors	X	
	Check dehumidifier and replace if necessary		X
	Change oil filter	X	
	Check humidity in oil		X
	Check screw terminal connections and tighten if necessary	X	X
	COOLING		
	Visually inspect water cooling hoses for leakage or degradation	X	
	Visually inspect oil hoses for leakage	X	
	Check function of oil circulation pumps		X
	CONTROL SYSTEM		
	Remote check of read value trends	X	X
	Verification of klystron current	X	X
	Verification of klystron voltage	X	X
	Verification of pulse length	X	X
	Verification of filament current	X	X
	Verification of bias current	X	X
	PDU		
	Check screw terminal connections and tighten if necessary		X



THANK YOU FOR YOUR TIME

Patrik Viklund – After Sales Manager