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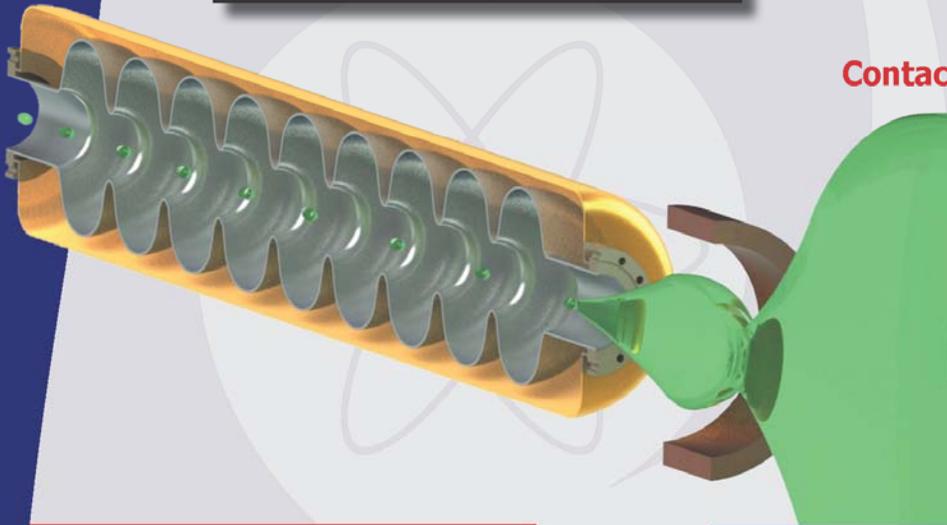
Superconducting Electron Linacs

Electron Beam Energy	0.5 - 50 MeV
Electron Beam Power	1 W - 1 MW
Electron Bunch Length	~ 10 ps



www.niowaveinc.com
sales@niowaveinc.com
517.999.3475

Contact us to discuss your needs



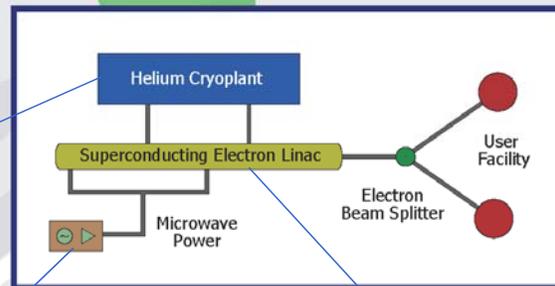
- Ultrafast Electron Microscope
- High Frequency Microwaves
- Terahertz Sources
- Free Electron Lasers
- X-Rays (High Intensity)
- X-Rays (Mono-energetic)
- γ -Rays
- Radioisotopes
- Photofission
- Wakefield Accelerators

Turn-key Systems

- ◆ Superconducting Linac
- ◆ Helium Refrigerator
- ◆ Licensing

Installed ready to operate at your facility.

Let us help you customize the exact electron linac you need.



Helium Cryogenics

Niowave offers several options, depending on the required cooling load and planned operating schedule.

- Batch filling
 - Use liquid helium Dewars
 - Standard sizes: 100, 250 and 500L
- 5W Cryocooler at 4.4K
 - Smaller systems or low duty cycle
 - Integrated into linac
- 100W Refrigerator/Cryoplat at 4.4K
 - Larger systems or high duty cycle / CW operations
 - 24 hrs / 7 day operations



Batch filling with a 250L helium Dewar

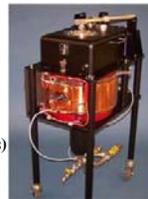


100 W Cryoplat

Microwave Power Sources

Niowave offers a broad range of options, depending on frequency, power and electrical efficiency requirements.

- Solid State Amplifiers
 - Low power: ~ 1 kW
 - High reliability
- Tetrodes
 - Intermediate power: ~10 kW
- Inductive Output Tubes (IOTs)
 - Medium power: ~100kW
- Klystrons
 - High power: ~1000kW (1 MW)



90 kW IOT



10 kW Tetrode

Niobium Superconducting Cavities 1.3 GHz 9-Cell ILC/TESLA



*Entry level niobium cavity delivered in 3 months (other options available).

Let us help you customize the exact niobium structure you need from 28 MHz to 3.9 GHz and beyond.



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