ScandiNova

M-SERIES **M050-i**

RF PEAK POWER UP TO 2 MW
MODULATOR PEAK POWER UP TO 4 MW

ScandiNova's smallest magnetron pulse modulator in a very compact enclosure with single-phase AC power requirements and air cooling. The modulator is designed for custom integration into your application and to handle magnetrons in the range 0.2 MW to 2 MW. We provide everything from a pure high-power pulse modulator to a turn-key RF station including the magnetron, control system and related components.

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SYSTEM SPECIFICATIONS	UNIT	DATA	NOTES
Magnetron RF Peak Power	MW	0.2–2	Depends on choice of magnetron
Magnetron RF Average Power	kW	0.4	Maximum
Modulator Peak Power	MW	0.6–4	Typical range
Modulator Average Power	kW	1	Maximum (see options)
Pulse Voltage	kV	20–40	Typical range
Pulse Current	A	20–100	Typical range
Pulse Repetition Frequency Range	Hz	1–500	Typical range. Depending on max average power (see options).
RF Pulse Length	µs	0.1–4	Typical range. Depending on max average power.
Modulator Voltage Stability, RMS	%	0.4	Verified on resistive load (see options)
Cooling		Air	

INTERFACE	DEFAULT	OPTION
Mains Power, Single Phase	230 VAC, 50/60 Hz	115 VAC
Control Interface	ModBus TCP	
Trig Input	Electrical	
Diagnostics	Pulse Voltage and Current	See Options

Standard Modulator Includes

Control System
Remote Control
Filament PS
Pulse Sensors
Internal Trig Generator

Additional System Components

Circulator & RF Loads
Directional Coupler
Magnet PS
Waveguide windows
Magnetron

Typical Magnetron Loads

BVERI
VE2042B
VE2093

CPI
SFD303B
SFD313
VMC1081
VMS1610
VMX3045
VMX3095
5586
5657

E2V
MG5125

L3
PMX1100
L-0123S
L-0124S
L-0500C
L-0777C
L-0778C
L-6170

NJRC
MX7637
MX7638
MX7639

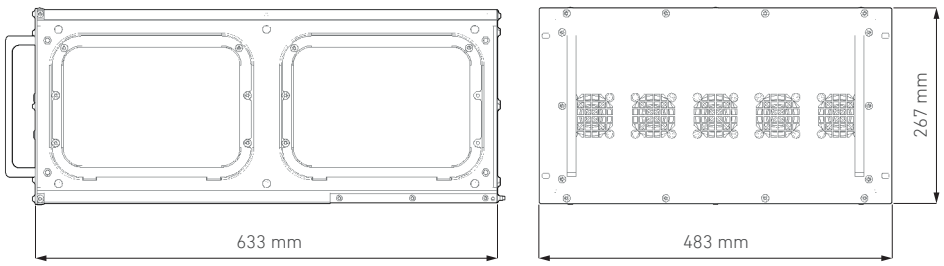
Options

Pulse/RF diagnostics
Enhanced PRF Range (1000–2000 Hz)
Enhanced Stability (down to 0.1%)
Digitizer

Size and Weight

Weight approx. 49–59 kg

Information contained in this document is subject to change without notice.



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