



High-powered solutions for RF and microwave applications

RF POWER SYSTEM WORK SHEET

Please document below customer specifications for RF power generators and impedance matching systems. Typical industry specifications are provided. OEM or custom specifications may be identified using the write-in areas. Consult product owner's manual for actual specifications.

RF Generator

Physical size:

- 19" rack mount X maximum height _____
 enclosure OEM "box" - size: _____ l" x _____ w" x _____ h"
 private label front panel _____
 OEM color _____

Code compliance:

- CE mark UL NRTL local _____

Cooling:

- forced air water water & air fitting type _____
 special requirements _____

AC Input power:

- 1 phase 187-240V 1 phase 110V 1 phase 208V
 1 phase 240V 3 phase 208V 3 phase 440
 3 phase 480 50 Hz 60 Hz 50/60 Hz
 connection type: i.e. hardwire, plug, plug & cord
(please specify type and cord length) _____

Output power:

- 100w 300w 600w 1000w 1200w
 2000w 2500w 3000w 5000w 10,000w
 15,000w RF output connector type _____
 typical OEM process power _____ watts
 reflected power tolerance _____ watts

Output frequency:

- 2 MHz 4MHz 13.56MHz 27.12MHz 40.68MHz
 60MHz 80MHz variable frequency 5-125MHz
 40-500KHz - actual frequency _____ OEM frequency _____

Output waveform:

- sine wave output square wave output frequency shift tuning
 pulse capability - frequency _____

Control method:

- local (via generator's front panel)
 remote digital RS-232 remote digital DeviceNet other _____
 remote analog
 required interface connector _____ (customer to furnish typical pin out)

Common Exciter Mode: Master Slave

Frequency Shift Tuning: Yes No

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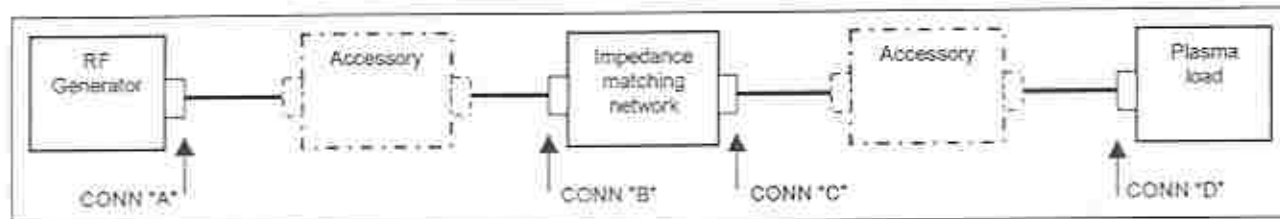
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COAX CABLE WORK SHEET

Proper coaxial cable configurations are required to connect an RF generator, impedance matching network, accessory (such as an external power meter, dummy load, attenuator or RF sensor). The plasma load (sputter gun, ICP source or electrode) may also be connected to the matching network output via a coaxial cable in low power applications < 1Kw).

Please document below customer specifications for a coaxial cable. Typical industry specifications are provided. OEM or custom specifications may be identified using the write in areas. *Use one worksheet for each cable type.*



Application:

- RF generator to impedance matching network
 matching network to plasma load
 other _____

Frequency of operation:

- 13.56 MHz 27.12 MHz _____ KHz _____ MHz

RF Power level:

- < 300 watts 300 – 600 watts 600 – 1200 watts 1200 – 2000 watts
 2500 watts 3000 – 5000 watts _____ watts

RF generator output connector type "A":

- male female BNC UHF C N HN 7/16 DIN
 LC EIA other _____

Matching network input connector type "B":

- male female BNC UHF C N HN 7/16 DIN
 LC EIA other _____

Matching network output connector type "C":

- male female BNC UHF C N HN 7/16 DIN
 LC EIA other _____

Plasma load connector type "D":

- male female BNC UHF C N HN 7/16 DIN
 LC EIA other _____

Distance between RF generator and matching network: _____ ft.

Distance between matching network and plasma load: _____ ft.

Special instructions: _____

Impedance Matching Network

Physical size:

- standard enclosure OEM "box" - size: _____ l" x _____ w" x _____ h"
 private label _____
 OEM color _____

Cooling:

- forced air water water & air fitting type _____
 special requirements _____

AC Input power:

- 1 phase 110-240V 50/60 Hz
 connection type: i.e. hardwire, plug, plug & cord
(please specify type and cord length) _____

Operating power:

- 100w 300w 600w 1000w 1200w
 2000w 2500w 3000w 5000w 10,000w
 15,000w RF input connector type _____
 RF output connection type - i.e. - RF connector, stud, etc. _____

Operational frequency:

- 2 MHz 4MHz 13.56MHz 27.12MHz 40.68MHz
 60MHz 80MHz 40-500KHz - actual frequency _____
 OEM frequency _____

Load Characteristics:

- Type: sputtering etching CVD deposition
 ICP other _____
Impedance: real _____ ohms imaginary _____ ohms
 phase angle _____ degrees
RF current: _____ amps DC bias maximum _____ volts

Operational Characteristics:

- presets capacitor type (vacuum or air) _____
 remote control local control length of control cable _____ ft
 special RF circuit configuration (PI or L) _____
 fixed or tapped series inductor _____

Additional Notes and Comments:

The customer is encouraged to furnish an exact I/O interface specification or reference a competitive manufacturer's product type.

CUSTOMER SUPPLIED INTERFACE SPECIFICATIONS

	SIGNAL TYPE OR FUNCTION	VOLTAGE LEVEL	DESCRIPTION OF FUNCTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Additional Notes and Comments:

RF Output Cable (Generator to Match)

Physical characteristics:

length _____ ft. connector type _____
 cable type _____

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