

# PPS 1000R

## RF plasma generator



Half Rack, 3U high



Air cooled



Digital display



Output power



Power measurement  
and status monitoring  
at analog interface



Interfaces:  
Analog / Digital,  
RS-232, RS-422

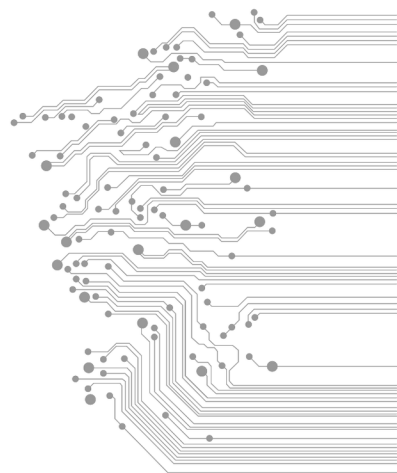
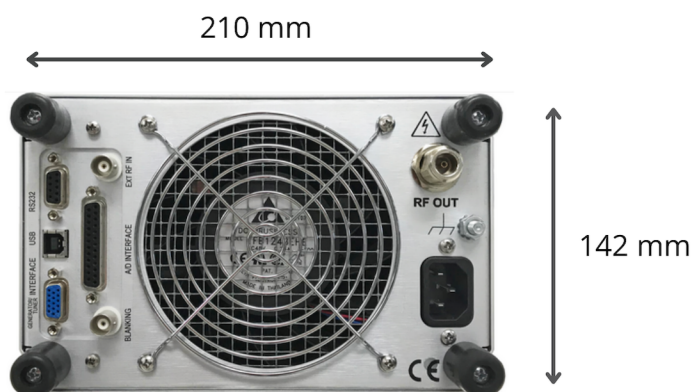


AGC Power Leveling,  
Low Harmonic Level,  
Pulse Operation,  
Ramping Profiles



Works with any  
tuner

# PPS1000R specifications



Frequency of operation	13.56 MHz
Frequency Stability	0.005% or better
RF Power Output	1000 Watts nominal into 50 Ohms
EXT RF Input Drive for AGC	+0 to +3 dBm for best operation
Input Drive Source for External RF Input	Signal or function generator, analog computer input capable of up to 2 Vp-p @ 50 Ohm
CEX Input / Output	3Vp-p to 8Vp-p at 13.56 MHz
Internal RF Source	Crystal oscillator at 13.56 MHz
Input and Output Impedance	50 Ohm
IN / OUT VSWR	1.2:1 max - input. 3:1 max - output
Output VSWR Protection	200 Watts max reflected power limit (Automatic limit within 0.1 ms)
Harmonic Level @ 100 W	$\geq -50$ dBc
Spurious Output	50 dBc
RF Output Stability	Unconditionally stable up to 10:1 VSWR, any angle, any load
Dynamic Power Range	1 to 1000 W, settings within +/- 2W
Scale	1 - 10V , user selectable
Pulse Operation	Pulse width: 1 ms–9995 ms. Controlled via front panel and GUI
Ramp Operation	Ramp speed: 1 W/s–99 W/s. Controlled via front panel and GUI
Controls & Communications	Analog ports: SUBD-25 (rear panel). Digital ports: RS-232, RS-422, USB 2.0 (rear panel)
RF Power Margin	$(\text{Open Loop Max Power}/\text{Rated Power}) - 1 \times 100 + 10\%$ - defined by AC/DC power supply settings, +50 % - RF section capacity
RF Connectors	INPUT BNC Female, OUTPUT N Female. BLANKING BNC Female Rear Panel
AC Power Connection	IEC Standard Power Entry followed by RFI filter. Filter range 0.1 to 30 MHz min
AC Circuit Protection	Internally fused on the main DC Power Supply
AC Input Current (RMS)	200-240 V ac, 50-60 Hz, 12 A
Cooling	Forced air
Dimensions	L 442 mm x W 210 mm x H 142 mm. Half Rack, 3U high
Weight	9.0 kg, 20 lbs.
Environmental conditions	Temp.: 0° to 40° C ambient. Humidity: 80%

## Additional ordering options

Generator with front panel controls
Generator module with blank front pane
Tuner (complete RF system)
[Rear panel] RF Input / Blanking ports OR CEX In / Out ports