

TruPlasma RF 3000-5/13 G3
Next Generation 13.56 MHz



G3 - Introducing the High Dynamic series to 13.56 MHz

Key Features

- Modular platform concept with most efficient design
- Cable length independence due to CombineLine Technology
- High speed pulsing up to 400 kHz
- Multi-Level-Pulsing
- Realtime output impedance measurement
- Integrated WebGUI
- Common FW platform for 13 MHz & VHF

Technical data of TruPlasma RF 3000-5/13

RF Output	TruPlasma RF 3000-5/13 High Dynamic	TruPlasma RF 3000-5/13
Output power range	1 W – 5 000 W	
Maximum reflected power	1 000 W	
VSWR 1.1 : 1	100 % of the nominal power	
VSWR 1.5 : 1	95 % of the nominal power	
VSWR 2 : 1	80 % of the nominal power	
VSWR 3 : 1	60 % of the nominal power	
VSWR infinite	20 % of the nominal power	
Output frequency	13.56 MHz \pm 0.005 %	
Output impedance	50 Ω	
Harmonic signals at full nominal output power at 50 Ω non-reactive load	-40 dBc	
Spurious signals at full nominal output power at 50 Ω non-reactive load	-50 dBc	
Power accuracy at 50 Ω load ¹	\pm 1 W or \pm 1 %	\pm 5 W or \pm 1 %
Fluctuation at 50 Ω load ¹	\pm 1 W or \pm 1 %	\pm 5 W or \pm 1 %
Reproducibility of the output power at 50 Ω load (device to device) ¹	\pm 1.5 W or \pm 1 %	\pm 10 W or \pm 2 %
RF output	LC	

¹ The larger value is valid

Operating Mode		
Regulation mode	Forward power, load power, external voltage	
Pulse mode	Single level, dual-level or multi-level pulsing	Single level
Pulsing frequency	1 Hz – 400 kHz	1 Hz – 50 kHz
Frequency agility	\pm 678 kHz (\pm 5 %) (optional)	
Arc management	yes (optional)	

Interfaces		
Interfaces	Analog, EtherCAT, Ethernet, SystemPort Optional: RS232/485 or DeviceNET Upon request: Profibus or ProfinET	Analog, EtherCAT, Ethernet, SystemPort
Front Panel	Ethernet & Status LEDs	None
Sync (CEX; pulse or arc)	yes	

Mains		
Mains voltage	200 – 480 VAC \pm 10 %, 3 phases + PE	400 – 480 VAC \pm 10 %, 3 phases + PE
Overall efficiency of mains to RF output at full nominal power at 50 Ω load	75 %	
Power factor (cos φ)	> 0.9	

Operating Conditions		
Cooling medium	Water	
Water temperature	5 °C – 35 °C	
Min. throughput	6 l / min @ < 25 °C	
Max. water pressure	8 bar	
Max. differential pressure	2 bar (6 l/min)	

Housing		
Protection class	30	
Dimensions (W x H x D in mm)	483 x 132.5 x 480 (19" rack mount, 3 HU)	
Weight	32 kg	

Standards and directives	SEMI F47 (voltage sag), SEMI S2 (safety interlock), CE, RoHS, NRTL	
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	Features	Specifications	TruPlasma RF 3000-5/13 High Dynamic
Standard	Product Status		✓
	Interfaces		Analog, EtherCAT, Ethernet, SystemPort1) (Optional: Ethernet/IP, DNET, RS232; Upon Request: PB, PNET)
	SystemPort		✓
	Pulsing	50 kHz	✓
	Setpoint Ramping		✓
	WebGUI		✓
Optional (all included in High Dynamic)	Arc Management		✓
	Auto Frequency Tuning	±5 %	✓
	Regulation Delay	P _R Masking	✓
	Frequency Offset		✓
	Extended Pulsing	100 kHz	✓
	High Speed Pulsing (High Dynamic)	400 kHz	✓
	Dual-Level-Pulsing (High Dynamic)		✓
	Multi-Level-Pulsing (High Dynamic)		✓
	Rated P _R Regulation		✓
	Metronome		✓
	HD Power Selection	0.1 Setpoint	✓
	Dual Frequency System		✗
	Real-Time measurement	Power Impedance	✓



Released

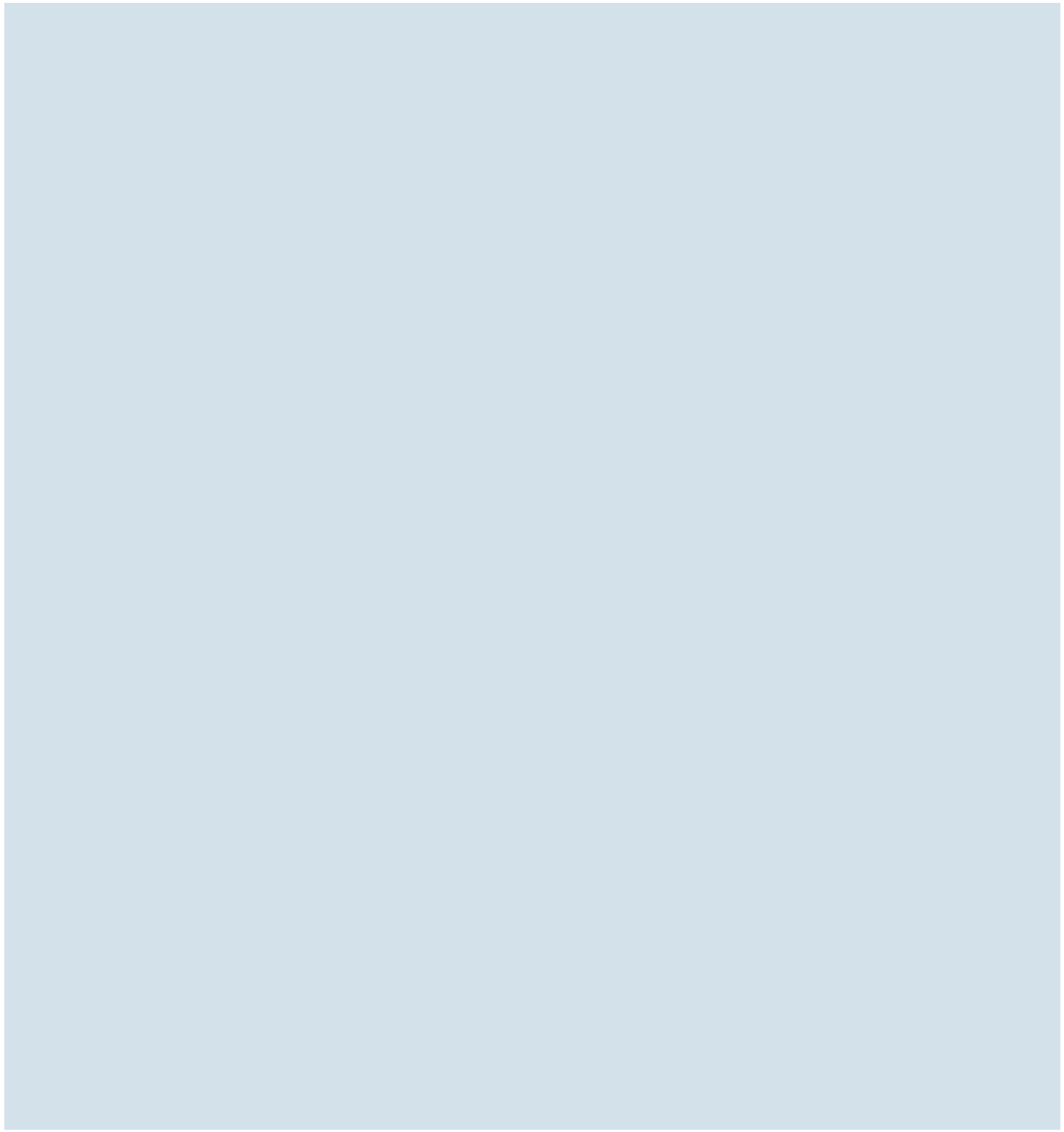


Availability on Demand



Planned Availability





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