



13.56 and 60 MHz, 600 W, 1000 W and 1100 W RF Generator

cito Plus

Comet Plasma Control Technologies has taken the cito RF Generator to the next level in performance and precision. The cito Plus is designed for highest stability into dynamic loads.

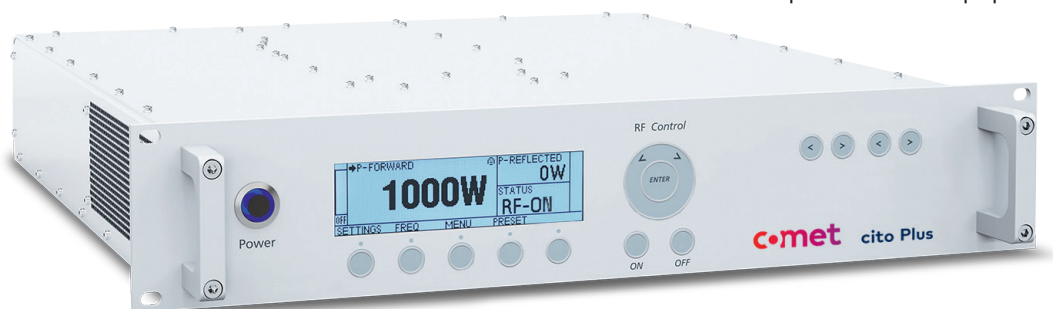
cito Plus offers superior pulsing quality, stability and power measurement accuracy, making it the best choice for plasma deposition and etch applications.

Features

- Symmetrical open loop response
- High accuracy power control
- Pulsing up to 100 kHz
- CEX with variable phase shift
- CEX output frequency divider
- SEMI compliant

Benefits

- Predictable plasma behavior
- Easy system integration
- Repeatable wafer results
- Stable with any cable length
- Superior pulse shape into any load
- Worldwide compatibility with most production equipment



comet
pct

Led by experience. Driven by curiosity.

cito Plus product range

Frequency	13.56 / 60 MHz
Frequency stability and accuracy	± 50 ppm
Output power	1 W to 600 W 1 W to 1000 W 13.56 MHz: 1 W to 1100 W
RF accuracy	± 1.0% of setpoint or ± 0.10% of max. power, whichever is greater
Spurious and harmonics	
Harmonics into 50 Ω	- 45 dBc
Spurious into 50 Ω	- 45 dBc
RF pulsing	
Pulse rate	1 Hz to 100 kHz
Pulse rise/fall time into any load	<300 ns / <400 ns
Interfaces Analog, RS232, Ethernet, Profibus, Matching network control	
CEX	Sender / Receiver
Power rating and coolant requirements	
AC input	230 V AC nominal (± 10%), single phase
Maximum current	<10 A
AC to RF efficiency	>70%
Operating temperature	+ 5 °C to + 35 °C
Cooling	Forced air
Configuration	
Front panel	Active or passive
Form factor	2U, full 19" rackmount
Dimensions excl. connectors	441 x 500 x 88 mm (w x d x h)
Weight	<16 kg
RF output connector	N-type
2014/35/EU Low Voltage directive EN 61010-1	
2014/30/EU EMC directive EN 55011 EN 61000-6-2	
2011/65/EU RoHS SEMI S2, S8, S14, S22, F47	

cito is a registered trademark of Comet AG

Switzerland (Head Office)

Comet AG
Flamatt

China

Comet Mechanical Equipment
(Shanghai) Co. Ltd., Shanghai

Germany

Comet Yxlon GmbH
Aachen

Japan

Comet Technologies Japan KK
Yokohama

Korea

Comet Technologies
Korea Co., Ltd., Suwon-si

Malaysia

Comet Technologies
Malaysia Sdn Bhd, Penang

Taiwan

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United States

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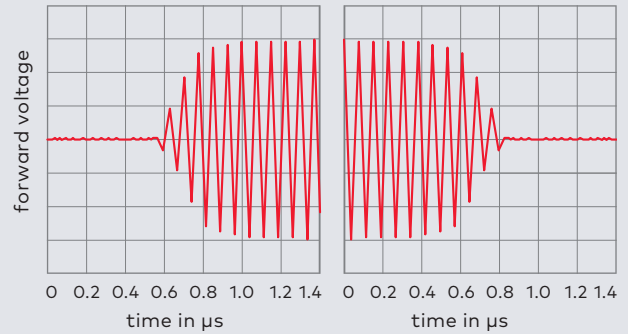
Exceptional pulsing performance

Pulse rise time

Ultra short rise times
<300 ns into any load
impedance without
overshoots

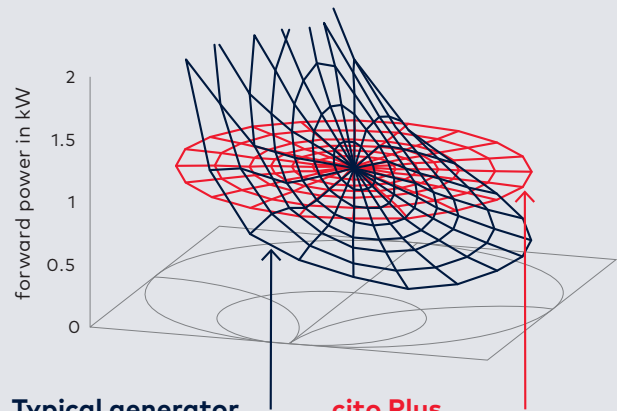
Pulse fall time

Clean falling edge
of the pulse even
under most difficult
conditions



Enhanced plasma stability

Symmetrical open loop response



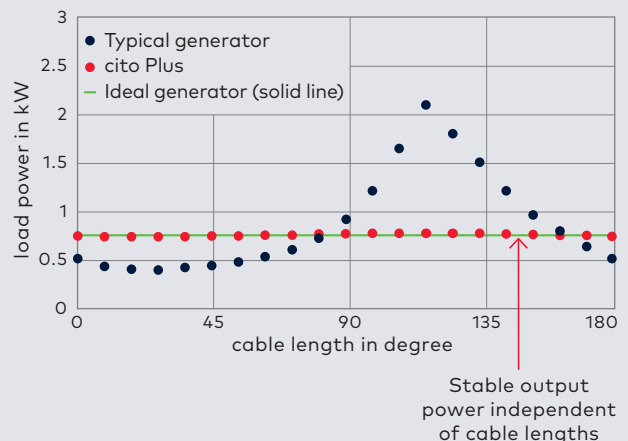
Typical generator

RF forward power
strongly depends on
the plasma load
impedance/condition

cito Plus

RF forward power
is independent
from the plasma
load impedance

Load power into 3:1 VSWR



Stable output
power independent
of cable lengths