T&CPOWERCONVERSIONINC

AG 0113

100W 13.56MHz

RF GENERATOR & AMPLIFIER

FEATURING

- Ideal for Industrial, Scientific and Medical (ISM) Applications
- Digital meter displaying forward, reflected and load power
- Complete control of all **Generator** and **Tuner** functions via front panel
- Analog & Digital interface
- Low harmonic level
- Data acquisition: Status Monitoring & Power Measurement at Analog Port
- Complete PC control via **GUI** software
- AGC power leveling
- Pulse operation

CE

RELIABILITY

T&C delivers a robust and reliable source of RF power with the AG 0613 using leading edge solid state design throughout all power stages.

Although we build our units to last and have an outstanding track record, our **service** is quick, accessible, and dedicated to providing you with immediate results.

COMPLETE PACKAGE

This generator has everything you need to effectively power and monitor your RF application.

In **generator** mode, the front panel offers a LCD display of Forward, Reflected and Load Power readings, RF Status, and setup screens for AGC and ramp mode operation.

In **tuner** mode, front panel offers status monitoring of T&C's AIT Tuner Series (when connected) with manual tuner control capability and a bank of programmable presets.

As an **amplifier**, the AG 0613 is compatible with standard 50Ω signal/function generators and computer synthesizer cards. It accurately reproduces all waveforms within its output and bandwidth limits. May also come with CEX connection capability for master/slave operation.

This compact unit at 5.25" H x 8.75" W x 15.00" L works as a stand-alone unit or half rack mount, with all necessary mounting hardware and cables included upon request.

Scan here for full technical info or visit TCPOWERCONVERSION.com
or email us at: info@tcpowerconversion.com

For quote, contact us at sales@tcpowerconversion.com **or call** (585) 482 - 5551

TECHNICAL SPECS

Class Of Operation
Class C

Frequency Of Operation
13.56 MHz

Frequency Stability
0.005% or better

RF Power Output
120 Watts nominal into 50 Ohms

EXT RF Input Drive for AGC
Recommended +0 to +3 dBm for the best operation

Input Drive Source for EXT RF IN
Signal or function generator, analog computer input capable of up to 2 Vp -p @ 50 Ohm

CEX Input*
3Vp-p to 8Vp-p at 13.56 MHz

CEX 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
50 Watts max reflected power limit. Automatic, limits typically within 0.1 ms after reverse power reaches 50 Watts or power amplifier current preset limit.

Harmonic Level @ 100 W
≥ - 50 dBc

Spurious Output
50 dBc

RF Output Stability
Unconditionally stable up to 10:1 VSWR, any angle, any load.

Output Blanking
T&C amplifiers and generators offer blanking of the output signal for minimum noise RF spectrum

Dynamic Power Range
1 to 120 W, settings within +/- 2W

Output Settings & Control (Communications)
SubD 25 Analog and Digital I/O .Rear Panel

NOTE: Check which scale is selected from the front panel SVC screen for your unit.

Available scales:

5 V=nominal power (factory setting)

10 V=nominal power

Digital Communication Port:

RS-232 - for programming only!

USB 2.0

RF Power Margin
(Open Loop Max Power/Rated Power)-1)*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)
100-120 V ac, 50-60 Hz, 6.0 A

200-240 V ac, 50-60 Hz, 3.0 A

Cooling
Forced air, temperature controlled, heatsink temperature monitored for equipment safety at 70C limit.

Dimensions
L 442 mm x W 210 mm x H 142 mm

(17.4” x 8.25” x 5.6”)

Weight
9.0 kg, 20 lbs.

Case
Front Panel: Plastic Overlay Coated Steel.

Aluminum Covers and Chassis.

Chassis designed to meet EMI RFI shielding requirements

Mounting
Half Rack, 3U high.

Optional: Rack Mount Kit, Adapter Kit, Coupling Screws.

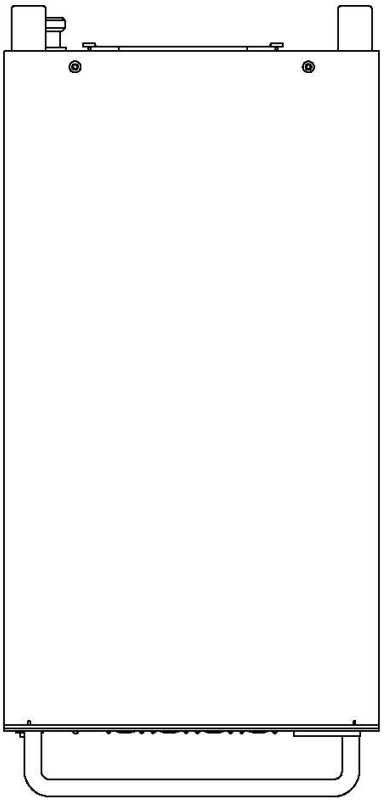
Environmental conditions
Temp.: 0° to 40° C ambient

Humidity: 80%

Equipment intended for ISM applications in laboratory and light industrial environment.

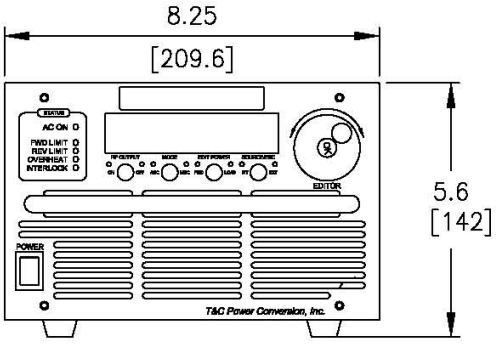
* for the models with CEX function

MIN 6" CLEARANCE FOR AIR EXHAUST

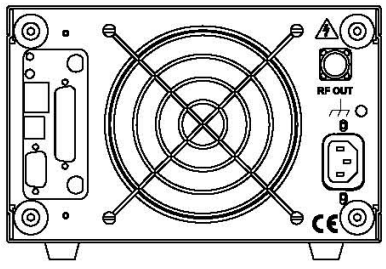


MIN 6" CLEARANCE FOR AIR INTAKE

FRONT PANEL



BACK PANEL



APPROVALS	DATE
DRAWN RMS	01/15/09
CHECKED	
ISSUED	

MOUNTING AND OUTLINE
AG0x13

T&C Power Conversion, Inc.
110 Halstead Street, Suite 7, Rochester, NY 14610

SIZE	DWG. NO.	REV.
A	9100 0211 92	A

SCALE		SHEET
NONE		1 OF 1

T&C Power Conversion, Inc.
110 Halstead Street
Rochester, New York 14610 USA
Phone: 1 585 482 5551
Fax: 1 585 482 8487
e-mail: sales@TCPowerConversion.com

EC Declaration of Conformity

according to EC EMC Directive 2004/108/CE

and according to EC Low Voltage Directive 2006/95/CE

We, ***T&C Power Conversion, Inc.***

of ***110 Halstead Street, # 7***
Rochester, NY 14610, USA

herewith declare, that the following product complies with the appropriate basic safety and health requirements of the EC Directive based on its design and type, as brought into circulation by us. In case of alteration of the product, not agreed upon by us, this declaration will lose its validity.

Product Description: RF Power Source

Model Number: **0113, 0113 D-Com, AG 0113**

Applicable EC Directive(s): **2006/95/CE - The Low Voltage Directive and its amending directives**

2004/108/CE - The Electromagnetic Compatibility Directive and its amending directives

Applicable Harmonized Standards: **EN 61010-1:2001 (2nd Edition)**
EN 61326-1: 1997 + A1:1998 +A2:2001 +A3:2003

Authorized Signature: *Tomasz Mokrzan* **Date:** 04/26/13

Name: **Tomasz Mokrzan**

Title of Signatory: **General Manager**

CE 13