The MCW00210S53A is a rack-mountable unit incorporating a universal voltage power supply and a built in forced air-cooling system.This amplifier subsystem utilizes GaN power device that provides excellent power density, high efficiency, low distortion and wide dynamic range. Due to robust engineering and employment of advanced broadband RF matching networks, combining techniques and qualified components, the amplifier achieves consistent performance with field proven reliability.

## Features:

- Instantaneous ultra broadband
- Suitable for CW, AM, and FM modulation type
- Solid-state class AB design
- Front panel manual gain adjust or LCD controller
- 50 ohm input/output impedance
- High stability and ruggedness

## Electrical Specifications (@220VAC, 50Ω System)

| Parameter | Symbol | Minimum | Typ | Maximum | Units |
|---|---|---|---|---|---|
| Operating Frequency | BW | 20 | | 1000 | MHz |
| Output Power CW | P1 | | 200 | | Watt |
| Power gain | PG | | 52 | | dB |
| Output Power @ 1dB Gain Compression | P1dB | | 160 | | Watt |
| Input Power for Rated PSAT | PIN | | 0 | 3 | dBm |
| Power Gain Flatness | ΔGp | | ±2 | | dB |
| Input Return Loss | S11 | | | -10 | dB |
| Noise Figure | NF | | 10 | | dB |
| Harmonics @ POUT = 100W | H | | -15 | -10 | dBc |
| Spurious Signals | Spur | | -60 | | dBc |
| Input /Output Impedance | Impedance | | 50 | | dBc |
| Power Consumption @ 100W CW | PD | | 1000 | | Watt |
| Operating Voltage (1-phase) | VAC | 100 | | 240 | Volt |

## Absolute Maximum Rating

| Parameter | Rating | |
|---|---|---|
| Input RF drive level without damage | +10dBm | Maximum |
| VSWR protection@30W | @ 3:1- PA output power will degrade to a safe operation level, and system will still work.<br>@ >3:1 protection will make system shutdown. | |
| Thermal Overload | 85°C shutdown | |

## Environmental Specifications (Design to Meet)

| Parameter | Minimum | Typical | Maximum | Units | Notes |
|---|---|---|---|---|---|
| Operating Temperature | -0 | | 50 | °C | |
| Storage Temperature | -40 | | 85 | °C | |
| Relative Humidity（non-condensing） | | | 95 | % | |

## Mechanical Specifications

| Parameter | Value | Units | Notes |
|---|---|---|---|
| Dimensions | 483 x 177 x 425 mm [19x6.96x17.5 inch] 4U | mm [inch] | Maximum |
| Weight | 12kg [27 lbs] | kg [lbs] | Maximum |
| RF Connectors Input | Typ-N Female | | |
| RF Connectors Output | Typ-N, Female | | |
| Cooling | Extemal Heatsink(Not Supplied) | | |

## AVAILABLE OPTIONS (Selected options refer to the factory)

| Description | LCD Screen | |
|---|---|---|
| Status Monitor | LCD controller | Digital Display, including FWD/REV Power indication (dBm or Watt scale), Standby mode, Fault indication |
| WAN(standard Ethernet) | Serial management of device | Internet access |

## WAN

| Description | Specifications | Option FGA | LCD |
|---|---|---|---|
| FWD (Optional) | Forward detected power | | |
| REV(Optional) | Reverse detected power | | |

## Outline Drawing (All dimensions in mm [inch])

