CS41000/CS40500

Solid State Power Amplifier Operating from 4.4 to 5.0 GHz Available in 500 or 1000 Watts

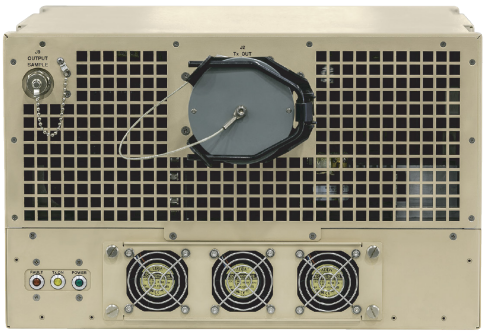
CS41000/CS40500

The CS41000/CS40500 is constructed with highly reliable gallium arsenide field-effect transistors. The GaN technology in the SSPAs allows linear operation much closer to rated output power compared to other power amplifiers and lower prime power requirements than GaAs FET amplifiers. The CS41000/CS40500 comes with enhanced built in features which other manufacturers offer as options, including temperature compensation, output sample port, forward and reverse power monitors, power factor corrected supply and full remote monitor & control (M&C) capabilities (including serial and Ethernet). Greatly enhancing system maintainability, the CS41000/CS40500 include built-in data logging capability. By recording critical operational parameters (such as temperature, output power, mute status, etc.) at time stamped intervals, the user can quickly gather intelligence about not only the unit itself, but also its operational environment.

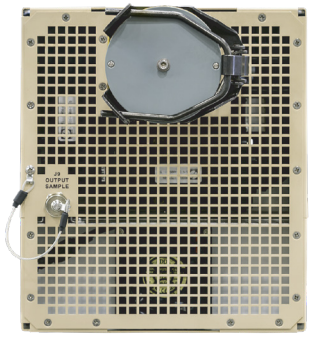
Key Features:

- State-of-the-art GaN Technology provides power efficiency and linearity at full rated power
- Standard enhanced built-in features include, output sample port, forward and reverse power monitors
- Safety features such as automatic RF inhibit, and mute are provided and can be connected to local sensors
- Remote monitor & control (M&C) capabilities (serial and Ethernet)
- Records critical operational parameters such as temperature, output power, mute status.

CS41000



CS40500



Comtech Technologies

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Technical Specifications:	CS40500	CS41000
Frequency Range	4.4 - 5.0 GHz	4.4 - 5.0 GHz
Instantaneous 3dB Bandwidth	600 MHz minimum	600 MHz minimum
Amplifier Type	Class A or AB, Continuous Wave	Class A or AB, Continuous Wave
Noise Figure	18 dB maximum	18 dB maximum
Rated Output Power	57 dBm minimum	60 dBm
Small Signal Gain	47.5 dB minimum	40.0 dB minimum
Gain Adjustment Range	10 dB minimum	10 dB minimum
Input Power Without Damage	+20 dB maximum	+30 dB mimimum
Gain Variation	±0.5 dB maximum	±0.5 dB maximum
Gain Slope	±0.02 dB/MHz maximum	±0.02 dB/MHz maximum
Gain Stability	±0.25 dB maximum/24 hours	±0.25 dB maximum/24 hours
Input VSWR	1.25:1 maximum (19.1 dB return loss)	1.25:1 maximum (19.1 dB return loss)
Load VSWR	1.5:1 for specification compliance / 2:1 with no damage	1.5:1 for specification compliance / 2:1 with no damage
AM to PM conversion	3.5°/dB at P rated - 1dB	3.5°/dB at P rated - 1dB
Phase Noise	(IESS 308/309) -10dB	(IESS 308/309) -10dB
Noise & Spurious	-70 dBc	-70 dBc
Spectral re-growth	-25 dBc minimum up to 1 dB below rated output power	-25 dBc minimum up to 1 dB below rated output power
RF Inhibit Response Time	500 µsec	500 µsec
AC Power:	**CS40500**	**CS41000**
AC Voltage	180-264 VAC	180-264 VAC
Frequency	47 to 63 Hz	47 to 63 Hz
Power Consumption	2250 VA max @ 500 W output	4500 VA max @ 1000 W output
Dimensions:	**CS40500**	**CS41000**
Height	10.4 in. (26.4 cm)	12.5 in. (31.75 cm)
Width	9.15 in. (23.2 cm)	17.625 in. (44.77 cm)
Depth	23.3 in. (59.1 cm)	23.5 in. (59.7 cm)
Weight	60 lb (27.2 kg)	23.5 in. (59.7 cm)
Enviromental:	**CS40500**	**CS41000**
Operating Temperature	-40°F to 140°F (-40°C to 60°C)	-40°F to 140°F (-40°C to 60°C)
Storage Temperature	-59°F to 167°F (-51°C to 75°C	-59°F to 167°F (-51°C to 75°C)
Humidity	Up to 100% condensing	Up to 100% condensing
Altitude	Up to 10,000 meters	Up to 10,000 meters

About Comtech

Comtech Technologies Corp. (Nasdaq: CMTL) is a leading global provider of next-generation 911 emergency systems and secure wireless communication technologies to commercial and government customers around the world. Comtech designs produces and markets advanced and secure wireless solutions.

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