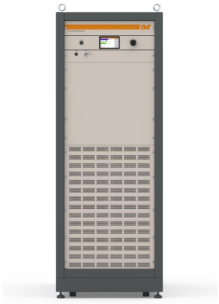
450S6G18C

6.0 GHz - 18.0 GHz, Class A Solid State Amplifier



The Model 450S6G18C is a solid-state, Class A design, self-contained, air-cooled, broadband power amplifier designed for applications where instantaneous bandwidth, high gain and linearity are required. It will provide a minimum of 450 W across its operating bandwidth of 6.0 - 12.0 GHz and 350 W from 12.0 - 18.0 GHz. Protection from input overdrive beyond 0 dBm is provided as well as protection from various failure conditions including over-temperature and power supply faults.

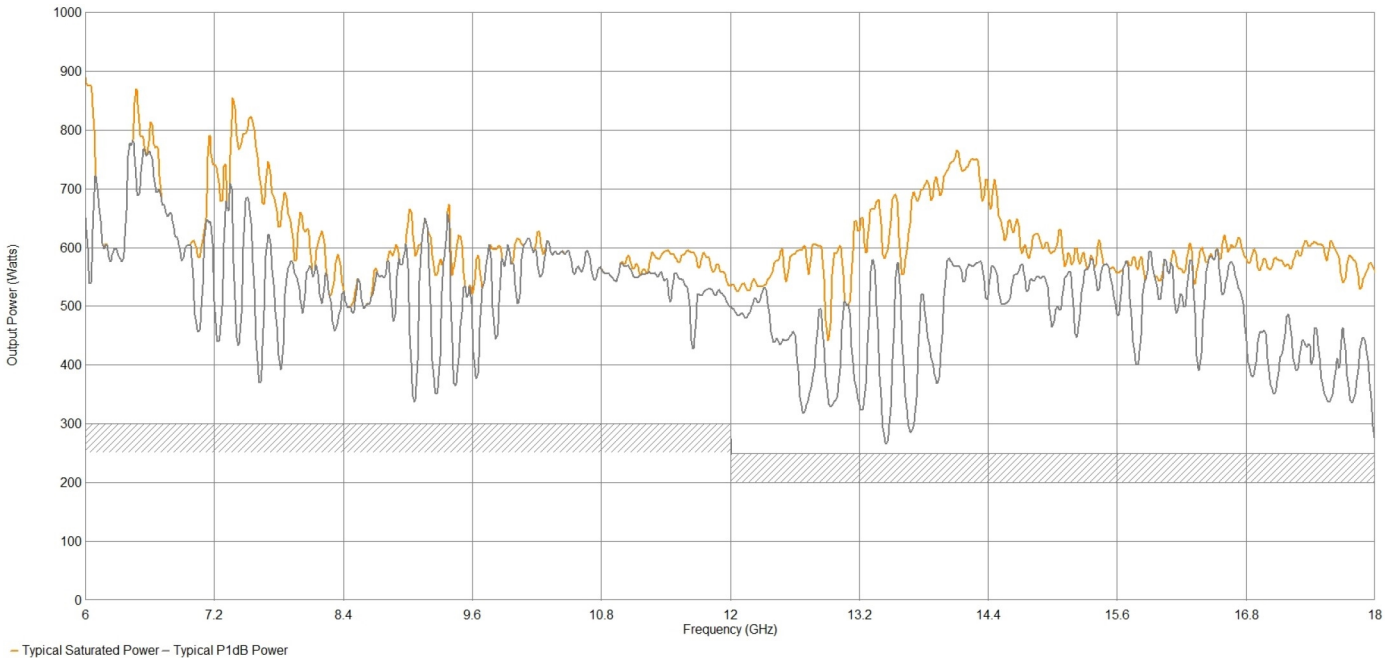
A front panel display indicates the operational status and fault conditions. All amplifier control functions, and status indications are available remotely using GPIB/IEEE-488, RS-232, fiber-optic serial, USB, or Ethernet. Interface connectors are located on the back panel. Local and remote operation is managed by a switch on the front panel.

This is a multiple purpose amplifier. The low level of spurious signals and linearity make it ideal for use as a driver in testing wireless and communication components and subsystems. By covering such a wide bandwidth, it is suitable for a variety of communication technologies such as CDMA, W-CDMA, TDMA, GSM, UWB, WiMAX etc.

The export classification for this equipment is 3A001. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

MAIN FEATURES

- **Class A Operation**
- **Touch Screen Display**
- **100% Mismatch Tolerant**
- **Scalable Modular Construction**
- **Ethernet, USB, GPIB, Fiber-optic & RS-232 Remote Interface**
- **3 Year Warranty**
- **Applications: Radiated Immunity (ISO, IEC, MIL) Communication, CDMA, W-CDMA, TDMA, GSM, UWB**



Technical Specifications

Frequency Range	6.0 - 18.0 GHz
Rated Output Power	6-12GHz - 450W (min) - 500W (typ)
Rated Output Power	12-18GHz - 350W (min) - 400W (typ)
Power Output @ 1dB Compression	6-12GHz - 300W (min) - 450W (typ)
Power Output @ 1dB Compression	12-18GHz - 250W (min) - 350W (typ)
Input for Rated Output	0dBm (1mW)
Small Signal Gain	58 dB
Gain Variation (max) ±	3.5 dB
Gain Control Adjust When Below P1dB	20 dB
Harmonics @ P1dB (min)	-16 dBc
Harmonics @ P1dB (typ)	-20 dBc
Spurious	-75 dBc
Input VSWR	2:1 (max)
Output VSWR	2.5:1 (typ)
Output Impedance	50 Ohm
3rd Order Intercept Point	63 dB
Noise Figure	12 dB
Modulation Formats	AM, FM, PM, ODFM
Maximum Input Power (no damage)	10 dBm
Output VSWR Tolerance	6:1 (Foldback @ 50%)
Stability	Unconditional

General Specifications

Acoustic Noise (measured @ 1 M)	68 dBA
Supply Frequency	47 to 63 (Hz)
Three Phase 5 Wire WYE Low Line	200 to 240 VAC
Three Phase 5 Wire WYE	380 to 415 VAC
Three Phase 4 Wire Delta	200 to 240 VAC
Supply Power (max)	9 KVA

Mechanical Specifications

RF Input Connector	Type-N Female
RF Output Connector	WR650 (Rear Panel)
RF Sample Port Connectors	Optional, Type-N Female, (coupling factor 56 dB typical)
Safety Interlock	15-Pin Subminiature D Female
Dimentions (With Cabinet) (W x H x D)	(30U Rack) - 56.3 x 153.9 x 95.5 cm (22.6 x 60.6 x 37.6 in)
Weight (With Cabinet)	412 kg (908 lbs)
Cooling System	Forced air (self contained fans)
Com. Interface	IEEE-488 / RS-232 / RS-232 (fibre optic) / USB 2.0 / Ethernet

Environmental Specifications

Ambient Running Temperature	5°C to +40°C
Storage Temperature	-20°C to +50°C
Maximum Altitude	up to 1000M
Shock and Vibration	Normal Truck Transport

Regulatory Compliance (CE)

EMC	EN 61326-1
Safety	UL 61010-1
RoHS	DIRECTIVE 2011-65-EU
Export Classification	3A001

Ordering Information

450S6G18C	-		-	N	-	R	-	WRD650
Model		RF IN Conn Location, Type				RF OUT Conn Location, Type		

Connector	
Front	F
Rear	R