



S61 D Series

0.8 – 6.0 GHz 30 Watts to 400 Watts P1dB Solid State Microwave Power Amplifiers



Instruments for Industry, S61 D Series Solid State amplifiers provide outstanding RF performance. Operating over the frequency range from 0.8 GHz to 6.0 GHz and can be supplied at power levels up to 400 watts P1dB offering all the control and communication features needed for today’s automated test systems. From the ground up, the S61 Series amplifiers are built to withstand rugged handling, whether it’s being shipped to you or hauled around from site to site.

Operation safety and ease of use are paramount in IFI product designs. The IFI S61 Series include a full complement of RF and hardware protection circuits including high VSWR, over-current, voltage protection, redundant thermal and airflow sensors for the module and system level. In addition, the S61 series includes an intuitive interface that is sophisticated, comprehensive, and yet simple to use. The color interface displays forward/reverse power indication, system status and self-diagnostic information. All the amplifiers operating parameters are simultaneously available via the interface as well as over the remote bus. Selection via the interface allow you to switch the amplifier to the desired mode of operation for local control if the unit is not being operated remotely.

For remote control operation USB, Ethernet, GPIB and RS232 interface are provided as standard. To meet individual application needs, the S61 Series amplifiers can be easily customized with other options. With this capability and its reliable design, the S61 series amplifiers are the perfect system for your applications.

MAIN FEATURES

- Intuitive user interface
- Rugged Modular Design Construction
- USB, Ethernet, GPIB and RS232 interface
- Built in Calibrated Directional Coupler
- 3 year warranty

Models & General Specifications

Model Number	Frequency Range	Rated Power	P1dB Power	Gain	Mains Power	Weight	Size
S61-100D	0.8 GHz - 6 GHz	125 W	100 W	50 dB	1.5 kVA	28 kg	19 inch, 4U Rack Case, 680 mm Deep
S61-200D		250 W	200 W	53 dB	2.5 kVA	50 kg	19 inch, 7U Rack Case, 680 mm Deep
S61-30D		35 W	30 W	45 dB	0.35 kVA	15 kg	19 inch, 4U Rack Case, 680 mm Deep
S61-400D		500 W	400 W	56 dB	5.5 kVA	160 kg	19 inch, 20U Rack, 1000mm Deep
S61-50D		60 W	50 W	47 dB	0.65 kVA	20 kg	19 inch, 4U Rack Case, 680 mm Deep



RF Specifications

Gain Variation (max) ±	+/- 3.0 dB
Harmonics P1dB	-20 dBc
Modulation Formats	AM, FM, Pulse
Gain Control	0-30 dB in 255 Steps
Output VSWR Tolerance	Infinite any phase (no foldback)
Stability	Unconditional
Output Impedance	50 Ohm
Input VSWR	2:1 (max)
Output VSWR	2.5:1 (max)
Spurious (min.)	-60 dBc
Spurious (typ.)	-70 dBc

General Specifications

Safety Interlock	Via rear panel mounted BNC-female
Supply Voltage	< 3KVA Single Phase 90 to 264 VAC, > 3KVA Three Phase, 5 Wire STAR, 380 to 415 VAC / 4 Wire Delta, 208 to 240 VAC
Supply Frequency	47 to 63 Hz
RF Input Connector	Type N female
RF Output Connector	Type N or 7/16 Female
Com. Interface	GPIB, RS232, Ethernet & USB
Cooling System	Air Cooled, Self-contained

Available Models

Product	Description
S61-100D	0.8 GHz to 6 GHz 100W P1dB Class A Broadband Power Amplifier
S61-200D	0.8 GHz to 6 GHz 200W P1dB Class A Broadband Power Amplifier
S61-30D	0.8 GHz to 6 GHz 30W P1dB Class A Broadband Power Amplifier
S61-400D	0.8 GHz to 6 GHz 400W P1dB Class A Broadband Power Amplifier
S61-50D	0.8 GHz to 6 GHz 50W P1dB Class A Broadband Power Amplifier