

SOLID STATE HIGH POWER AMPLIFIERS

MILITARY

COMMUNICATIONS

SATELLITE

RADAR

INSTRUMENTATION

MEDICAL

SWITCHES



COMTECH PST ™

TABLE OF CONTENTS

General Purpose Linear Amplifiers
 Series AM 4
 Series AR 5

Wireless Band Linear Amplifiers
 Series AM Wireless..... 6
 Series AR Wireless 7

100 Watt Amplifiers
 Series UMTS/PCS/DCS 8

Class AB Linear Amplifiers
 Series BHE..... 9-11

Pulse Amplifiers
 Series PHE/PHC 12

Class C Amplifiers
 Series CHC 13

Medical Products
 Series SSPA 14

Satellite Products
 Series Satcom 15

**High Power Switches
 and Limiters** 16

**Custom Design
 Capability** 17

**Environmental Specifications
 and Conversion Charts**..... 18

Quality 19

Remote Control Interfaces 19

Comtech PST Corporation

105 Baylis Road
 Melville, NY 11747
 USA

Telephone: +1 (631) 777-8900
 Fax: +1 (631) 777-8877
 E-mail: sales@comtechpst.com
 Web: www.comtechpst.com



Comtech PST Corp. (CPST) designs, develops, and manufactures solid-state high-power amplifiers.

We serve a variety of domestic and international high technology markets including defense, wireless and satellite communications, cellular and PCS instrumentation, electromagnetic compatibility testing, and medical testing systems. Located in Melville, NY, Comtech PST's facility is a modern, 46,000 square-foot structure that provides office space for our corporate office as well as engineering and manufacturing for the Comtech PST Division.

A subsidiary of Comtech Telecommunications Corp., the PST division was established in 1987 for the express purpose of designing and manufacturing High Power RF Amplifiers. Our engineering talent has participated in the major growth of this technology. This background in solid state amplifier design and development has provided CPST with experience in such diverse fields as EW/ECM systems, TACAN/RADAR systems, TWT replacement, high power testing, satellite tracking systems, communication, RFI/EMC testing, radio transmitters, boosters, and general laboratory testing. Our fully staffed engineering support group is always available to provide expert assistance for any of your special needs relating to design and application issues.

Comtech PST has continued to expand its capabilities through continual improvement of our product offerings, as well as through acquisitions. In recent years, Comtech PST has acquired companies whose product offerings and technology complement our own legacy of solid state amplifier products.

Hill Engineering, a manufacturer of solid state control devices, was acquired by CPST in 2000. This division of CPST provides solid state high power RF switches for integration into many of our power amplifier systems. A stand alone product line of Hill's products can be found on page ____.

Microwave Power Devices, also a manufacturer of solid state power amplifiers since 1967, was acquired by Comtech PST in 2001. The product lines acquired have extensive applications in the commercial satellite, medical, and defense markets.

Through continued investment in improving technologies and strategic acquisitions, Comtech PST has positioned itself as the market leader in solid state power amplifier products and systems.

PRODUCTS AND CAPABILITIES

Comtech PST's focus on making superior solid state amplifiers has led to the development of a versatile and highly reliable product line. Whether your needs include amplifier module building blocks, rack-mounted amplifier units, or complete amplifier systems, our standard and customized solid-state power amplifier products provide the flexible effective solution.

Comtech PST Corp. offers solid-state power amplifiers in frequency ranges from 1 MHz through 3.0 GHz, with output power levels ranging from 5 watts to over 30 kW.

While we offer standard products to serve a variety of markets and applications, at times a custom-designed amplifier may be required. Our highly-skilled engineering staff possesses the knowledge and ability to design and develop cost-effective custom solutions to meet your solid state power amplifier requirements.

CUSTOMER SERVICE

Comtech PST Corp. is, above all, committed to our customer's satisfaction. This responsibility is woven into the corporate fabric with our technical expertise, defined quality standards, and production of versatile and highly reliable solid state amplifiers. Comtech PST's commitment does not stop at delivery.

We have a dedicated customer service staff to continually support all of our products. They are here to satisfy the needs of our customers. This includes performing warranty and out-of-warranty repairs, providing spare parts information, answering equipment installation and operation questions, and providing technical documentation and training as required.

ABOUT COMTECH PST CORPORATION

With the resources and corporate backing of Comtech Telecommunications, you can rest assured that any products you purchase from Comtech PST will be supported for years to come.

QUALITY SYSTEM

Comtech PST Corp. is an ISO9001:2000-certified company. We take seriously the responsibility for maintaining this strict quality standard.

At Comtech PST Corp., we see it as a logical extension of our ongoing commitment to quality. CPST has always had well-established, written practices and procedures assuring complete product integrity throughout all stages of design, manufacture, test and inspection.

ISO 9001 quality system certification of Comtech PST further assures you of consistent and reliable products. The ISO 9001 certification emphasizes the company's commitment to provide our customers with the highest quality solid state power amplifiers.

QUALITY POLICY

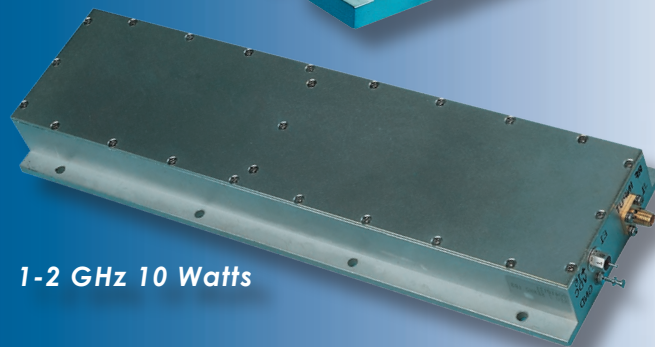
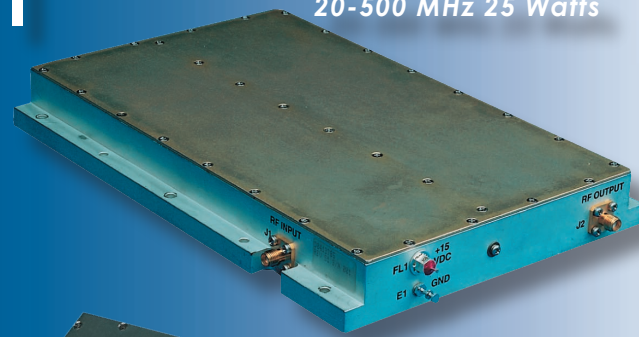
Comtech PST Corp. is committed to the continuous pursuit of quality in every aspect of our business. We strive to deliver excellence and will continue to improve our products and services to better satisfy the needs of our customers. Our goal is to deliver on time and every time defect free products and services. We define Quality as meeting customer requirements (both internal and external), including cost and schedules. Each of us is accountable for the quality of the work we do. Our aim is to be the supplier of choice of all our customers.



GENERAL PURPOSE LINEAR AMPLIFIERS

Series AM

20-500 MHz 25 Watts



1-2 GHz 10 Watts

■ Frequency Range: 20 MHz to 2 GHz;
bandwidths to multi-octave

■ Power Output: 2 to 100 watts

Model No.	Frequency (MHz)	Power Out		Gain at P1dB (dB min)	Current (amps max)	Dimensions					Weight		
		P1dB	Sat			H (in)	W (cm)	(in)	L (cm)	(in)	(lbs)	(kg)	
AM2758-10	20-500	10	15	40	3.35A @ 24Vdc	1.75	4.45	3.625	9.21	6.00	15.24	1.6	0.73
AM2758-25	20-500	25	30	44	7.5A @ 24Vdc	1.62	4.11	3.63	9.21	8.50	21.59	3.20	1.45
AM88258-10	800-2500	10	13	40	7.5A @ 15Vdc	1.06	2.69	6.24	15.85	9.38	23.82	3	1.36
AM88258-30	800-2500	30	34	45									
AM88258-50	800-2500	50	55	47									
Call sales dept for full information													
AM8829-5	800-2000	5	6	37	3A @ 15Vdc	1.06	2.69	3.35	8.51	10.68	27.13	1.8	0.82
AM8829-10	800-2000	10	13	40	5.5A @ 15Vdc	1.06	2.69	3.35	8.57	10.68	27.13	1.8	0.82
AM8829-30	800-2000	30	34	45	14.5A @ 15Vdc	1.06	2.69	7.125	18.1	9.875	25.08	4	1.82
AM8829-50	800-2000	50	55	47	23.5A @ 15Vdc	1.06	2.69	7.5	19.05	14.4	36.58	6	2.73
AM4819-10	400-1000	10	12	44	5A @ 26Vdc	1.3	3.3	4	10.16	6	15.24	1.5	0.68
AM4819-50	400-1000	50	70	47	11A @ 26Vdc	1.5	3.81	3.75	9.52	11.5	29.21	3.5	1.59
AM178238-10	1700-2300	10	13	40	5.5A @ 15Vdc	1.06	2.69	3.35	8.51	10.68	27.13	1.8	0.82
AM178238-30	1700-2300	30	34	45	14.5A @ 15Vdc	1.06	2.69	7.125	18.1	9.875	25.08	4	1.82
AM17839-10	1700-3000	10	13	40	7.5A @ 15Vdc	1.06	2.69	3.35	8.51	13.25	33.66	2.2	1
AM17839-30	1700-3000	30	33	45	17A @ 15Vdc	1.06	2.69	7.125	15.85	9.875	25.08	4	1.82

Specifications are subject to change without notice.

Series AM amplifiers are available for operating frequencies from 20 MHz to 2 GHz and output power from 2 to 100 Wat 1 dB compression.

Their design utilizes the most advanced state-of-the-art technologies in RF/microwave power, including combination techniques and component selection of transistors.

ELECTRICAL

RF Input Signals	CW, AM, FM, Phase and Pulse Modulation
Harmonics	-20dBc Max
Spurious	-60dBc Max
Input VSWR	2.0:1 Max
Load VSWR	Open / Short Circuit Protected, Unconditionally Stable
Noise Figure	10dB Typical
Maximum RF Input	10dBc above the input required to achieve P1dB
RF Connectors	SMA Female
Model	
• AM2758	+/-2.0dB
• AM88258	+/-1.5dB
• AM8829	+/-1.5dB
• AM4819	+/-1.0dB
• AM178238	+/-1.0dB
• AM17839	+/-1.0dB

AVAILABLE OPTIONS

- Noise Quiet
- Custom Specifications
- Other Frequency Ranges, Power Levels, Gains and Connectors

GENERAL PURPOSE LINEAR AMPLIFIERS

Series AR

Series AR amplifiers are rack-mountable units which incorporate the Series AM amplifier in a cabinet containing a built-in universal AC power supply (for models up to 100 watts). Models are available for operation at frequencies from 20 MHz to 2 GHz and output power from 10 to 250 W. They are forced-air cooled by blowers built into the mechanical package. AR models are also available with an optional IEEE BUS for remote control and monitoring (ARD version).



800-2000 MHz 10 Watts

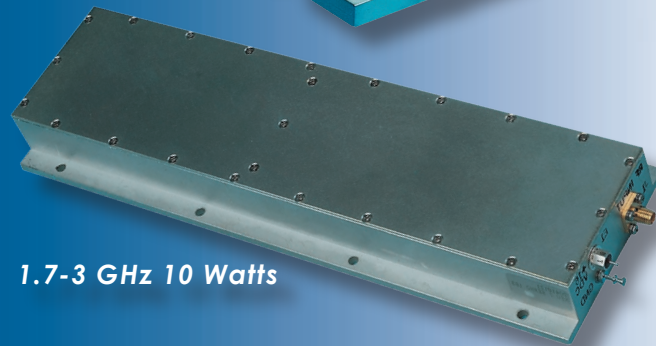
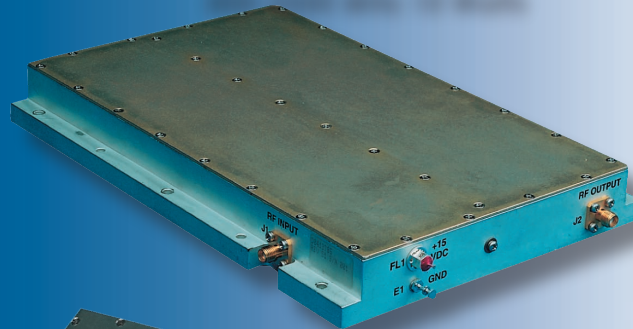
Model No.	Frequency (MHz)	Power Out		Gain at P1dB (dB min)	KVA	Dimensions					Weight			
		P1dB	Sat			H (in)	W (cm)	(in)	L (cm)	(in)	(lbs)	(kg)		
AR2758-10	20-500	10	15	40	0.115	5.22	13.26	19	48.26	22	55.88	25	11.36	
AR2758-25	20-500	25	30	44	0.23	5.22	13.26	19	48.26	22	55.88	30	13.64	
AR88258-10	800-2500	10	13	40	0.173	5.22	13.26	19	48.26	22	55.88	25	11.36	
AR88258-30	800-2500	30	34	45	0.438	5.22	13.26	19	48.26	22	55.88	40	18.19	
AR88258-60	800-2500	60	70	47.8	0.645	8.72	22.15	19	48.26	26.25	66.68	80	36.36	
AR88258-150	800-2500	150	200	52	2.1	PA	12.22	31.04	19	48.26	26.25	66.68	115	52.27
						PS	5.22	3.2	19	5.22	5.22	5.22	5.22	5.22
AR8829-10	800-2000	10	13	40	0.173	5.22	13.26	19	48.26	22	55.88	25	11.36	
AR8829-30	800-2000	30	35	45	0.312	5.22	13.26	19	48.26	22	55.88	35	15.91	
AR8829-50	800-2000	50	55	47	0.404	5.22	13.26	19	48.26	22	55.88	40	18.19	
AR8829-100	800-2000	100	115	50	0.863	8.72	22.15	19	48.26	26.25	66.68	80	36.36	
AR1929-250	1000-2000	250	280	54	2.7	PA	10.5	26.67	19	48.26	26.25	66.68	115	52.27
						PS	5.22	13.26	19	48.26	22	55.88	60	27.27
AR4819-10	400-1000	10	15	40	0.173	5.22	13.26	19	48.26	22	55.88	25	11.36	
AR4819-25	400-1000	25	30	45	0.404	5.22	13.26	19	48.26	22	55.88	35	15.91	
AR4819-50	400-1000	50	55	47	0.404	5.22	13.26	19	48.26	22	55.88	35	15.91	
AR178238-10	1700-2300	10	13	40	0.173	5.22	13.26	19	48.26	22	55.88	25	11.36	
AR178238-30	1700-2300	30	35	45	0.312	5.22	13.26	19	48.26	22	55.88	35	15.91	
AR178238-50	1700-2300	50	55	47	0.404	5.22	5.22	19	19	19	19	19	19	
AR178238-100	1700-2300	100	115	50	1.04	8.72	22.15	19	48.26	26.25	66.68	80	36.36	
AR178238-200	1700-2300	200	225	54	2.54	PA	10.5	26.67	19	48.26	26.25	66.68	109	52.27
						PS	5.22	13.26	19	48.26	22	55.88	30	13.64
AR178238-300	1700-2300	260	300	54.7	1.5	PA	12.22	31.04	19	48.26	26.25	66.68	115	52.27
						PS	5.22	13.26	19	48.26	22	55.88	60	27.27
AR17839-10	1700-3000	10	13	40	0.138	5.22	13.26	19	48.26	22	55.88	25	11.36	
AR17839-30	1700-3000	30	35	45	0.312	5.22	13.26	19	48.26	22	55.88	35	15.91	
AR17839-50	1700-3000	50	60	47	0.46	5.22	13.26	19	48.26	22	55.88	40	18.19	

Specifications are subject to change without notice.

WIRELESS BAND LINEAR AMPLIFIERS

Series AM Wireless

800-2500 MHz 10 Watts



1.7-3 GHz 10 Watts

Series AM cellular amplifiers are available for operating frequencies from 800 to 3000 MHz and output power from 10 to 50 W at 1 dB compression. Their design utilizes the most advanced state-of-the-art technologies in RF/microwave power, including combination techniques and component selection of transistors.

ELECTRICAL

RF Input Signals.....	CW, AM, FM, Phase and Pulse Modulation
Harmonics.....	-20dBc Max
Spurious.....	-60dBc Max
Input VSWR.....	2.0:1 Max
Load VSWR.....	Open / Short Circuit Protected, Unconditionally Stable
Noise Figure.....	10dB Typical
Maximum RF Input.....	10dBc above the input required to achieve P1dB
RF Connectors.....	SMA Female
Model	
• AM88258.....	+/-1.5dB
• AM178238.....	+/-1.0dB
• AM17839.....	+/-1.0dB

AVAILABLE OPTIONS

- Noise Quiet
- Custom Specifications
- Other Frequency Ranges, Power Levels, Gains and Connectors

Model No.	Frequency (MHz)	Power Out		Gain at P1dB (dB min)	Current (amps max)	Dimensions					Weight		
		P1dB	Sat			H (in)	W (in)	L (in)	H (cm)	W (cm)	L (cm)	(lbs)	(kg)
AM2758-10	20-500	10	15	40	3.35A @ 24Vdc	1.75	4.45	3.625	9.21	6.00	15.24	1.6	0.73
AM2758-25	20-500	25	30	44	7.5A @ 24Vdc	1.62	4.11	3.63	9.21	8.50	21.59	3.20	1.45
AM88258-10	800-2500	10	13	40	7.5A @ 15Vdc	1.06	2.69	6.24	15.85	9.38	23.82	3	1.36
AM88258-30	800-2500	30	34	45		Call sales dept for full information							
AM88258-50	800-2500	50	55	47									
AM8829-5	800-2000	5	6	37	3A @ 15Vdc	1.06	2.69	3.35	8.51	10.68	27.13	1.8	0.82
AM8829-10	800-2000	10	13	40	5.5A @ 15Vdc	1.06	2.69	3.35	8.57	10.68	27.13	1.8	0.82
AM8829-30	800-2000	30	34	45	14.5A @ 15Vdc	1.06	2.69	7.125	18.1	9.875	25.08	4	1.82
AM8829-50	800-2000	50	55	47	23.5A @ 15Vdc	1.06	2.69	7.5	19.05	14.4	36.58	6	2.73
AM4819-10	400-1000	10	12	44	5A @ 26Vdc	1.3	3.3	4	10.16	6	15.24	1.5	0.68
AM4819-50	400-1000	50	70	47	11A @ 26Vdc	1.5	3.81	3.75	9.52	11.5	29.21	3.5	1.59
AM178238-10	1700-2300	10	13	40	5.5A @ 15Vdc	1.06	2.69	3.35	8.51	10.68	27.13	1.8	0.82
AM178238-30	1700-2300	30	34	45	14.5A @ 15Vdc	1.06	2.69	7.125	18.1	9.875	25.08	4	1.82
AM17839-10	1700-3000	10	13	40	7.5A @ 15Vdc	1.06	2.69	3.35	8.51	13.25	33.66	2.2	1
AM17839-30	1700-3000	30	33	45	17A @ 15Vdc	1.06	2.69	7.125	15.85	9.875	25.08	4	1.82

Specifications are subject to change without notice.

WIRELESS BAND LINEAR AMPLIFIERS

Series AR Wireless

Series AR amplifiers are rack-mountable units which incorporate the Series AM amplifier in a cabinet containing a built-in universal AC power supply (for models up to 100 watts). Models are available for operation at frequencies from 800 to 3000 MHz and power from 10 to 300 watts. They are forced-air cooled by blowers built into the mechanical package. AR models are also available with an optional IEEE BUS for remote control and monitoring (ARD version).



1700-2120 MHz 300 Watts

ELECTRICAL

RF Input Signals.....	CW, AM, FM, Phase and Pulse Modulation
Harmonics.....	-20dBc Max
Spurious.....	-60dBc Max
Input VSWR.....	2.0:1 Max
Load VSWR.....	Open / Short Circuit Protected, Unconditionally Stable
Noise Figure.....	10dB Typical
Maximum RF Input.....	10dBc above the input required to achieve P1dB
RF Connectors.....	Type N Female Front or Rear mount available
Model	
• AR2758.....	+/-2.0dB
• AR88258.....	+/-1.5dB
• AR8829.....	+/-1.5dB
• AR4819.....	+/-1.0dB
• AR178238.....	+/-1.0dB
• AR17839.....	+/-1.0dB
AC Input:.....	Power Factor Corrected Universal AC input 100 - 240Vac, 50/60Hz for models up to 100 Watts. Power Factor Corrected AC input 200 - 240Vac, 50/60Hz for models above 100 Watts. 3 Phase input available.

AVAILABLE OPTIONS

- Digital Interfaces available: ETHERNET, RS232, IEEE488
- Noise Quiet, Remote On/Off
- Rack Mounting Slides
- Custom Specifications

- Frequency Range: 800 MHz to 3.0 GHz; bandwidths to multi-octave
- Power Output: 10 to 300 watts
- Universal AC input (Models up to 100 watts)

Model No.	Frequency Range (MHz)	Power Out (W@1dB)	Dimensions (h x w x d) in
AR88258-10	800-2500	10	1.06 x 6.24 x 9.38 2.79 x 14.98 x 23.87
AR88258-30	800-2500	30	1.1 x 15 x 9.4 2.79 x 38.1 x 23.87
AR88258-60	800-2500	60	1.1 x 3.4 x 10.7 2.79 x 8.64 x 27.18
AR88258-150	800-2500	150	1.1 x 7.2 x 9.9 2.79 x 18.29 x 25.12
AR178238-10	1700-2300	10	5.25 x 19.0 x 22.0 13.34 x 48.26 x 55.88
AR178238-30	1700-3000	30	5.25 x 19.0 x 22.0 13.34 x 48.26 x 55.88
AR178238-50	1700-2300	50	5.25 X 19.0 X 22.0 13.34 x 48.26 x 55.88
AR178238-100	1700-2300	100	8.75 x 19.0 x 26.0 22.23 x 48.26 x 66.04
AR178238-200	1700-2300	200	
AR178198-200	1750-1850	200	12.25 x 19.0 x 26.0 31.12 x 48.26 x 66.04
AR178228-300	1700-2120	300	15.75 x 19.0 x 26.0 40.0 x 48.26 x 66.04
AR17839-10	1700-3000	10	5.25 x 19.0 x 22.0 13.34 x 48.26 x 55.88
AR17839-30	1700-3000	30	5.25 x 19.0 x 22.0 13.34 x 48.26 x 55.88
AR17839-50	1700-3000	50	8.75 x 19.0 x 22.0 22.23 x 48.26 x 55.88

Specifications are subject to change without notice.

CLASS AB LINEAR AMPLIFIERS

Series BHE



20-2500 MHz 250 Watts



100-500 MHz 100 Watts

- Frequency range 20 to 1000 MHz
- Power output 100 to 1100 W
- AB linear
- Wide bandwidth
- Power output 100 to 1500 W
- AM, FM, CW, pulse & phase modulated signal inputs
- Built-in test diagnostics
- Field-replaceable modules
- Graceful degradation
- High efficiency switching power supplies
- Standard 19" Rack Mount Configuration

Series BHE Amplifiers are arranged in a variety of configurations, depending on the output power requirements and frequency range.

The series BHE wide bandwidths are ideal for multi-octave, frequency-agile systems; Typical applications include:

- EW/ECM systems
- Communication systems
- AM/FM transmitter boosters
- TWT replacement
- RFI/EMI testing
- High power calibration testing

LOAD VSWR PROTECTION:

Series BHE amplifiers provide load VSWR protection via an electronic power output turndown system employing negative feedback techniques. The system is self-correcting as a function of load VSWR to infinity, at any phase angle. The typical response time is 60 μ sec. The magnitude of turndown follows the curve shown in Fig. A, Page 10?

INPUT/OUTPUT OVERDRIVE PROTECTION:

A leveling loop system protects the amplifiers from input overdrive signals of up to +8 dB. Under an overdrive condition, the output power is controlled at a level 2 to 10% above the rated output power at normal input level conditions. A power overshoot will be present at the beginning of the overdrive condition, which is a function of the amount of overdrive. Note that this characteristic can be used to obtain a 1 to 3 dB output (or more depending on model) power increase for narrow pulses with a low duty cycle.

CLASS AB LINEAR AMPLIFIERS

Series BHE



100-500 MHz 1100 Watts



20-500 MHz 200 Watts

ELECTRICAL

Class of Operation	AB Linear
RF Input Power.....	1mW (0dBm) for full output power
RF Input Signals	CW, AM, FM, Phase and Pulse Modulation
Harmonics:	
• B.W. <One Octave.....	-30dBc Max
• B.W. <One Octave	
• Even	-20dBc Max
• Odd	-12dBc
Spurious	-60dBc Max
Input VSWR.....	2.0:1 nominal
Output Load VSWR	1.3:1, full forward power output
	2:1, 0.5dB turndown nominal
	infinite, 10dB turndown nominal (see plot on this page)
AM Distortion (85% D.O.M.)	10% Max
Pulse Rise/Fall Time (typical)	
• 1.5-30MHz Models.....	500ns
• > 20 MHz Models.....	150ns
Noise Power Output	-86dBm/Hz typical (model dependant)
Maximum RF Input	+8dBm
RF Connectors	
• Input.....	Female Type N, Rear Panel
• Output	Female Type N or SC, Rear Panel (model dependant)
Built-in Test (Models => 500 W)	
• Digital Meters	Relative Forward/Reflected Power, Module Status, Power Supply Current and Voltage
• Indicators.....	Power On, Thermal Overload, Fault Sense
• Protection.....	Load VSWR, Thermal Overload, Input Overdrive, Graceful Degradation, Over voltage, Under voltage, Over current
AC Input	
• 100 and 200 W Models	Power Factor Corrected Universal Input 100-240Vac, 50/60Hz
• 500 to 1500 W Models	Power Factor Corrected 208, 380 or 440VAC available, 50/60Hz, 3 Phase 5 wire (400Hz available)
Efficiency (AC to RF)	16% typical

AVAILABLE OPTIONS

- Digital Interfaces available: ETHERNET, RS422, RS232, IEEE488
- Mechanical or Solid State Switched Filter Assemblies
- Forward/Reflecting Sample Ports
- Relaxed turndown into High Load VSWR available for some models
- AM Leveling Loop
- Noise Quieting
- Remote On/Off
- Other Primary Power (AC or DC)
- Rack Mounting Slides
- Custom Specifications

CLASS AB LINEAR AMPLIFIERS

Series BHE

Model No.	Frequency (MHz)	Power Out (W)	KVA	Driver		Power Amp		Cabinet Height		Power Supply		Combiner Filter		Total Height		Combined Weight	
				(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)	(in)	(cm)
BHE1637-100	1.5-30	100	1.3			5.22	13.26							5.22	13.26	40	18.19
BHE1637-200	1.5-30	200	1.8			5.22	13.26							5.22	13.26	40	18.19
BHE1637-500	1.5-30	500	2.5			8.72	22.15							8.72	22.15	80	36.36
BHE1637-1000	1.5-30	1000	3.7			8.72	22.15	5.22	13.26					13.94	35.4	165	75
BHE1637-1500	1.5-30	1500	7.5	12.22	31.04			8.72	22.15	12.22	31.04			33.16	84.23	237	107.5
BHE1858-100	100-500	100	1.3			5.22	13.26							5.22	13.26	40	18.19
BHE1858-250	100-500	250	3.3			5.22	13.26							5.22	13.26	40	18.19
BHE1858-500	100-500	500	3.75			8.72	22.15	5.22	13.26					13.94	35.4	185	84.1
BHE1858-1100	100-500	1100	6.8			12.22	31.04	8.72	22.15					20.94	53.19	237	107.5
BHE2718-100	20-100	100	1.7			5.22	13.26							5.22	13.26	40	18.19
BHE2718-200	20-100	200	3.3			5.22	13.26							5.22	13.26	40	18.19
BHE2718-500	20-100	500	3.35			8.72	22.15							8.72	22.15	80	36.36
BHE2718-1500	20-100	1500	8.8			12.22	31.04	8.72	22.15					20.94	53.19	237	107.5
BHE2728-1000	20-200	1000	6.6			8.72	22.15	8.72	22.15					17.44	44.3	237	107.5
BHE2758-100	20-500	100	1.7			5.22	13.26							5.22	13.26	40	18.19
BHE2758-200	20-500	200	2.6			5.22	13.26							5.22	13.26	40	18.19
BHE2758-500	20-500	500	3.5			8.72	22.15	5.22	13.26					13.94	35.4	180	81.82
BHE2758-800	20-500	800	6.5	8.72	22.15	12.22	31.04	8.72	22.15	8.72	22.15			38.38	97.49	400	181.82
BHE22748-100	225-400	100	0.7			5.22	13.26							5.22	13.26	40	18.19
BHE22748-200	225-400	200	2.6			5.22	13.26							5.22	13.26	40	18.19
BHE22748-500	225-400	500	3.2			12.22	31.04							12.22	31.04	110	50
BHE22748-1000	225-400	1000	7.5			12.22	31.04	8.72	22.15					20.94	53.19	237	107.5
BHE4819-100	400-1000	100	0.86			5.22	13.26							5.22	13.26	45	20.45
BHE4819-200	400-1000	200	2			5.22	13.26							5.22	13.26	55	25
BHE4819-500	400-1000	500	4.9			8.72	22.15	5.22	13.26					13.94	35.4	185	84.1
BHE4819-1000	400-1000	1000	7.5			12.22	31.04	8.72	22.15					20.94	53.19	237	107.5
BHC88148-100	850-1450	100	1.3			5.22	13.26							5.22	13.26	40	18.19

Specifications are subject to change without notice.

PULSE AMPLIFIERS

Series PHE/PHC

Series PHE/PHC pulse amplifiers are available in both rack mount and modular configurations, featuring PST's modular construction and rugged design.

Amplifiers available from 400MHz through 1600MHz.

Module products features basic control and monitor functions. Rack mount products features built in

test and optional digital interface. Custom designs

available for different frequency ranges and output powers.



1000 MHz 150 Watts



1030 MHz 2.5 Watts

AVAILABLE OPTIONS

- Forward/ Reflecting Sample Ports
- Pulse Width and Duty Factor Input Protection
- Custom Control and Monitoring Configurations
- Rise/Fall time and Spectrum Containment Pulse Shaping
- Digital Interfaces available: ETHERNET, RS422, RS232, IEEE488
- Other Primary Power (AC or DC)
- Custom Specifications
- Internal Modulator
- Rack Mounting Slides
- Remote On/Off

TYPICAL APPLICATIONS:

- Radar
- TACAN/DME/IFF

ELECTRICAL

- Class of Operation AB or C (model dependant)
- RF Input Power..... +10dBm for full output power (0dBm available)
- RF Input Signals..... Pulse Modulation
- Input VSWR..... 2.0:1 nominal
- Output Load VSWR
 - Series PHE 1.3:1: full forward power output
 - 2:1: 0.5dB turndown nominal
 - infinite: 10dB turndown nominal
 - Series PHC Circulator Protection
- Maximum RF Input +18dBm or 8dBm (model dependant)
- RF Connectors
 - Modules
 - Input Female SMA
 - Output Female SMA, TNC, or N (model dependant)

- Rack Mount
 - Input Female Type N, Rear Panel
 - Output Female Type N or SC, Rear Panel (model dependant)
- Built in Test (rack mount models)
 - Indicators
 - Power On, Thermal Overload, Fault Sense
 - Protection Load VSWR, Thermal Overload, Input Overdrive, Graceful Degradation, Over voltage, Under voltage, Over current
- AC Input Power Factor Corrected Universal Input 100 – 240Vac, 50/60Hz
- Power Factor Corrected 208, 380 or 440VAC available, 50/60Hz, 3 Phase 5 wire (400Hz available)

Model No.	Frequency (MHz)	Power Out (peak watts min)	Pulse Width (max)	Duty Factor (% max)	Rise/Fall Time (max)	Dimensions (power amp)				Combined Weight (lbs) (kg)			
						Height (in)	Height (cm)	Width (in)	Width (cm)		Length (in)	Length (cm)	
MODULES													
PHC427457-500	430 - 450	500	2ms	10	200ns/200ns	A 4.25	10.8	6.47	16.43	11.95	30.35	7.41	3.37
PHC427457-520	420 - 450	520	100us	10	200ns/200ns	1.32	3.35	6	15.24	11.5	29.21	4.31	1.96
PHC1037-2500	1030	2500	B	B	100ns/100ns	1.28	3.25	6.74	17.12	8.5	21.59	3.6	1.64
PHC1037-4000	1030	4000	B	B	100ns/100ns	1.28	3.25	6.74	17.12	8.5	21.59	3.83	1.74
RACK MOUNT													
BPHE5819-1000	500-1000	1000	100us	4	40ns/40ns	8.72	22.15	19	48.26	26.25	66.68	165	75
BPHC968129-3000	960-1215	3000	4us	5	2us/2us	8.72	22.15	19	48.26	21.5	54.61	130	59.1
PHC19-150	1000+/-10	150	1us	5	50ns/50ns	5.22	13.26	19	48.26	14.5	36.83	25	11.36
PHC1039-1000	1030 & 1090	1000	800ns	0.03	100ns/100ns	5.22	13.26	17	43.18	14.5	36.83	80	36.36
CPHC1030-6400	1030	6400	800ns	0.036	150ns/150ns	10.47	26.59	19	48.26	18	45.72	44	20

NOTES

- A** Size includes: Heat Sink and Mounting Flange
- B** IFF Compliant: MODES 1, 2, 3, 4, MODE-S, Short Message, and MODE-5 Long Message 32us MODE-S Available
- Units are specified for military aircraft environment

Specifications are subject to change without notice.

MEDICAL PRODUCTS

Series SSPA



SSPA 2997-300



SSPA2856-240

- Internal Frequency Synthesizer
- AFC Control
- 17dB Min Output Power Control
- Elapsed Time Meters
- Front Panel Power Meter

Model No.	Frequency (MHz)	Power Out (peak watts min)	Pulse Width (us max)	Duty Facto (% max)	Dimensions						Weight	
					(in)	H (cm)	W (in)	(cm)	L (in)	(cm)	(lbs)	(kg)
SSPA2856-240	2856 +/- 3MHz	240	3us to 13us	0.5%	3.468	8.81	19	48.26	16.6	41.16	12	5.45
SSPA2997-300	2997 +/- 3MHz	300	2.5us to 12.5us	0.5%	8.72	22.15	11.75	29.85	16.38	41.61	27	12.27

Specifications are subject to change without notice.

The SSPA series of amplifiers operate in S-Band with power levels up to 300 watts peak. These Class 'C' amplifiers are designed for maximum power output and maximum AC to RF efficiency with minimal size. Typically used as driver amplifiers for Klystron PA's within a Linear Accelerator.

ELECTRICAL

Frequency Range	2856 +/- 3MHz (1) 2998 +/- 3MHz (2)
Output Power	240 Peak Watts (1) 300 Peak Watts (2)
Pulse Rise/Fall Time	0.18us Max
Load VSWR.....	10:1 Max, Circulator Protected
RF Connectors	Female Type N, Rear Panel
Pulse Trigger Connector	Female BNC, Rear Panel
Reliability	MTBF 20,000 Hours
AC Input	110 or 240Vac, 50/60Hz, 1 Phase

- (1) Model SSPA2856-240 includes ETHERNET Control/Status, Digital ALC Loop, 0.1dB Output Power Control via Front Panel, ETHERNET or external resistor
- (2) Model SSPA2997-300 includes 0 – 10Vdc Analog Frequency Control, Digital Status/Power Meter, 25dB Output Power Control

AVAILABLE OPTIONS

- Interfaces available: ETHERNET, RS422, RS232, CAN
- Internal Pulse Trigger
- Pulse to Pulse Power Control over 6dB range in 0.1dB steps
- Pulse to Pulse Width Control over 2.5us to 12.5us range in 250ns steps
- Other Operating Frequencies, Power Levels
- Custom Specifications

APPLICATIONS

- Oncology Treatment
- Electronic Pasteurization
- X-Ray Cargo Inspection

SATELLITE PRODUCTS

Series SATCOM



BME 1667-25



BHED 1667-25

The Satcom series of airborne amplifiers operate over the INMARSAT frequency Range of 1626.5 to 1660.5 MHz. Their designs utilizes linear amplifier technology (class AB) for amplification of multiple input carriers. These amplifiers provide the lowest distortion (IMD) with the highest efficiency possible. Their light weight and compact size make them suitable for airborne applications where weight and size are essential.

ELECTRICAL

Frequency Range	1626.5 to 1660.5 MHz
Output Power	60W CW ±0.5dB, two Carriers, 30W Each
Intermodulation	2 30W Carriers -25dBc
Class of Operation	Class "AB" Linear
Output Power Reporting	±1.0dB, 16dB Dynamic Range
Gain	60 ±2 dB
RF Input Overdrive	+20 dBm
RF Input Low Level Detection	-30 dBm ± 2 dB
RF Input Range	-12 dBm for Nominal 60W Output
Gain Stability/Variation	±1.0 dB Frequency, Temperature, Time
AM/PM Conversion	2°/dB or 30°/2msec
Spurious	-55 dBc, <1530 MHz, >1559 MHz -83 dBc 1530 MHz to 1559 MHz
Harmonics	-50 dBc Max. 0-5,000 MHz -55 dBc Max. 5,000 to 18,000 MHz
Noise Figure	<20 dB for 0 dB Backoff
Input VSWR.....	2.0:1 Max.
Load VSWR.....	2:1 any Phase. Fully Protected into any VSWR
AC Input	115 VAC, 400 Hz
Heat Dissipation.....	300W Max. at 60W RF Output
Cooling	External Force Air
Control/Status.....	Output Power Reporting VSWR Reporting Individual Device Failure Internal Shutdown Temperature Reporting Transmit Enable
Weight	Less than 10 pounds
Size	12.5" x 10.2" x 7.6"
MTBF	30,000 Hours
Construction	Field Replaceable Modules
Qualification	RTCA DO-160D
Temperature	-40 to +70°C
Altitude	55,000 feet

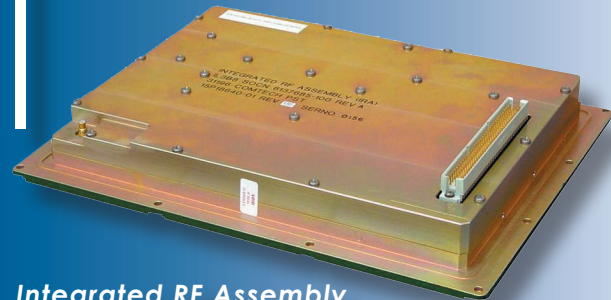
Specifications are subject to change without notice.

- ARINC 429 compatible (60W Model)
- Linear operation (Low IMD)
- RTCA DO-160 D Qualified

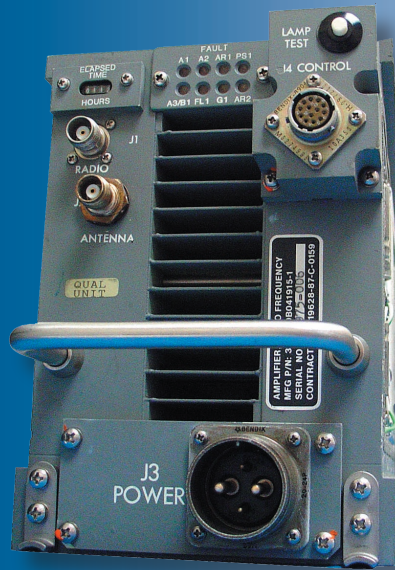
ELECTRICAL

Frequency Range	1626.5 to 1660.5 MHz
Output Power	25W CW ±0.5dB
Intermodulation.....	2 12.5W Carriers -26dBc
Class of Operation	Class "AB" Linear
Output Power Reporting	±1.0 dB
Gain	34 ±3 dB
RF Input Overdrive	+10 dBm
Gain Stability/Variation	±1.0 dB Frequency, Temperature, Time
Remote Muting.....	Muted Power, < -41.5 dBw
AM/PM Conversion	2°/dB or 30°/2msec
Spurious	-55 dBc, <1530 MHz, >1559 MHz -83 dBc 1530 MHz to 1559 MHz
Harmonics	-50 dBc Max. 0-5,000 MHz -55 dBc Max. 5,000 to 18,000 MHz
Noise Figure	<10 dB
Input VSWR.....	2.0:1 Max.
Load VSWR.....	2:1 any Phase. Fully Protected into any VSWR
DC Input	+25V dc @ 6 Amps Max. +15V dc @ 500 ma Max. -15V dc @ 200 ma Max. +5V dc @ 100 ma Max.
Heat Dissipation.....	115W at 25W RF Output
Cooling	External Force Air
Control/Status.....	Output Power Reporting VSWR Reporting Internal Shutdown Temperature Reporting Transmit Enable
Weight	Less than 10 pounds
MTBF.....	30,000 Hours
Construction	Field Replaceable Modules
Qualification	RTCA DO-160D
Temperature	-40 to +70°C
Altitude	55,000 feet

CUSTOM DESIGN CAPABILITIES



Integrated RF Assembly



**Airborne Booster Amp
225-400MHz 200 Watts**



20-512MHz, 1 kW Mobile Jammer

While the standard products we offer are suitable for most applications, there are times when a custom design is required as a solution. Comtech PST has the background and experience to design, manufacture, and deliver a complete custom solution to meet your requirement. Let our vast technical engineering expertise help you with your application.

Listed below and on the next page are several examples of custom designs and applications.

COMMUNICATIONS

Applications include Secure Digital Radio, Airborne Boosters, Integrated RF Assemblies, and High Power Communications Radio Boosters.

COMMUNICATIONS JAMMERS / CONVOY PROTECTION

Comtech PST's amplifiers are utilized to counter the threat of improvised explosive devices, as well as for other communications jamming applications. Platforms include fixed sites, airborne and ground-based mobile jamming.



Ground-based mobile jamming

CLASS C AMPLIFIERS

Comtech PST has extensive experience in the design and manufacture of Class C amplifiers, which allow for maximum efficiency (AC to RF) for transmission of both frequency and phase-modulated carriers. Also available in weather-proof designs.

PCS / DCS / UMTS AMPLIFIERS

Designed in both single and dual band configuration, available in both module and rack-mountable form.

RADAR

Comtech PST has designed amplifiers and systems for several types of radar applications, including Airborne and Shipborne radars, IFF interrogation, synthetic aperture radar, and over-the-horizon radar.

WATTMETER CALIBRATION

Comtech PST has previously designed and manufactured several systems for use in wattmeter calibration.

Comtech PST possesses the experience and knowledge to help you find a solution to your requirements.

For more information on these products, as well as new product offerings, or to locate a sales representative in your area, please visit our website, www.comtechpst.com.

Contact a member of our sales staff today at +1 (631) 777-8900, or via e-mail at sales@comtechpst.com.

CUSTOM DESIGN CAPABILITIES



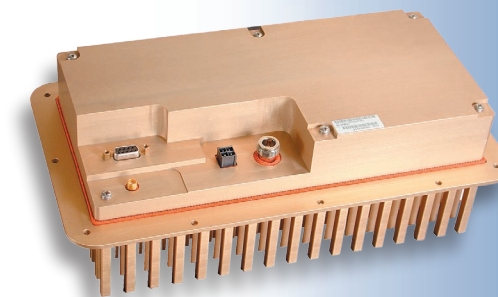
**2025-2120MHz 250 Watts
(Weather-Proof Design)**



Dual 2110-2170MHz 100 Watts

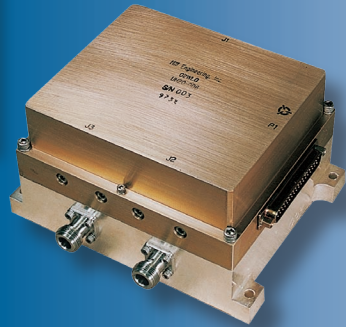


1-500MHz 500 Watts



SAR Module 400-450MHz 500 Watts

HIGH POWER SWITCHES AND LIMITERS



The switches listed below are our standard module MIC high power diode switch designs. Typical applications include antenna selection, transmit/receive, polarity switches, receiver protection, switch filters, switch-limiters and switched fixed attenuators. Standard module designs are for reflective, cold-switched usage. Certain parametric restrictions may apply to your application. Other options such as straddle-band operation, hot switching, absorptive (matched) ports, position indicators and fail-safe or latching are available.

RF SWITCHES

Model No.	Frequency (MHz)	Config.	Power Peak (watts)	Power Average (watts)	Speed (µS)	Isolation (dB)	Insertion Loss (dB)	Bias (V DC)	Connector Type
VH20-180	20-100	T/R	1300	1300	40	30/60	0.25	+5 & +28	TYPE NF
VH40-182	20-100	1P4T	1300	1300	40	40	0.3	+5 & +28	TYPE NF
VH20-280	20-500	T/R	500	500	40	30/60	0.5	+5 & +28	TYPE NF
H21-102	100-1000	T/R	500	100	7	20/50	0.7	+5 & -70	SMAF
UH21-201	100-500	T/R	800	800	40	30/60	0.45	+5 & +28	TYPE NF
UH22-301	500-1000	T/R	500	500	40	30/60	0.5/1	+5 & +28	TYPE NF

MICROWAVE SWITCHES

Model No.	Frequency (GHz)	Config.	Power Peak (watts)	Power Average (watts)	Speed (µS)	Isolation (dB)	Insertion Loss (dB)	Bias (V DC)	Connector Type
H22-103	0.5-2	T/R	10000	80	1.5	20/50	0.7	+5 & -50	SMAF
H22-200	1-2	1P2T	2000	80	1.5	40	1	+5 & -50	SMAF
H42-400	0.5-2	1P4T	1000	80	1.5	40	2.3	+5 & -50	SMAF
H22-202	2-4	1P2T	2000	80	1.5	40	1.2	+5 & -50	SMAF
H42-401	2-4	1P4T	2000	80	1.5	40	2.5	+5 & -50	SMAF
H23-203	4-8	1P2T	2000	80	1.5	40	1.3	+5 & -50	SMAF
H43-403	4-8	1P4T	2000	80	1.5	40	1.9	+5 & -50	SMAF
H24-204	8-12	1P2T	2000	80	1.5	40	1.5	+5 & -50	SMAF
H44-404	8-12	1P4T	2000	80	1.5	40	2.5	+5 & -50	SMAF
H25-205	12-18	1P2T	2000	80	1.5	40	1.8	+5 & -50	SMAF
H45-405	12-18	1P4T	2000	80	1.5	40	2.9	+5 & -50	SMAF
H26-206	6-18	1P2T	2000	80	1.5	40	2.5	+5 & -50	TNCF
H46-406	6-18	1P4T	2000	80	2	40	3.4	+5 & -50	TNCF

MICROWAVE LIMITERS

Model No.	Frequency (GHz)	Pulse Width (µS)	Power Peak (watts)	Power Average (watts)	Recovery Time (µS)	Flat Leakage (dBm)	Spike Leakage (erg)	Insertion Loss (dB)	Connector Type
HL2-235	.5-4	20	1000	50	5	18	0.5	1.1	SMAF
HL3-236	4-18	20	100	25	5	18	0.5	1.7	SMAF

For Environmental Specifications, see page 18, Table 3. Specifications are subject to change without notice.

HIGH POWER SWITCHES AND LIMITERS

COMPACT 20-500MHz HIGH POWER PIN DIODE SWITCH

These compact high power switches are built on a ceramic substrate in a thermally efficient aluminum package. The package size is 3" x 2.3" x 1.5". Typical applications include T/R switches, filter switches, and antenna or amplifier selection diversity switches for radar, radios, and COMMJAM systems.

COMPACT 20-500MHz HIGH POWER PIN DIODE SWITCHES

Model No.	Frequency (MHz)	Config	Power Peak (watts)	Power Average (watts)	Pulse Width (µS)	Loss (dB)	Isolation (dB)	Speed to 0.5 dB (µS)
M20-027	20-500	SP2T	150	150	CW	0.6	40	20
M20-030	20-500	SPDT/TR	500	250	100	0.5	40/50	15
M20-033	30-400	SP2T	150	150	CW	0.5	34	20
M20-034	225-450	SP2T	500	200	150	0.5	25	15
H20-001	400-500	SP2T	1000	120	15	0.45	30	6
M20-035	20-500	SP2T	250	120	80	0.55	25	10

RECEIVE POWER 1P2T DIODE SWITCHES

These switches are our standard MIC diode switch designs. Custom variations include connectors, size and shape modifications, higher power handling, faster switching, BIT and position sense.

RF SWITCHES

Model No.	Frequency (MHz)	Speed (µS)	Matched Outputs	Power CW (watts)	VSWR (Typ.)	Isolation (dB)	Bias (VDC)	Insertion Loss (dB)	Connector Type
R20-201	20-100	2	NO	1	1.2:1	60	+5, -15	0.25	SMAF
R20-202	20-100	2	0.1W	1	1.4:1	60	+5, -15	0.3	SMAF
R21-201	20-500	2	NO	1	1.5:1	50	+5, -15	0.5	SMAF
R21-102	100-1000	2	NO	1	1.6:1	60	+5, -15	0.7	SMAF
R21-202	100-500	2	0.1W	1	1.5:1	60	+5, -15	0.45	SMAF
R22-201	500-1000	2	NO	1	1.4:1	60	+5, -15	0.6	SMAF

MICROWAVE SWITCHES

Model No.	Frequency (GHz)	Speed (nanosec)	Matched Outputs	Power CW (watts)	VSWR (Typ.)	Isolation (dB)	Bias (VDC)	Insertion Loss (dB)	Connector Type
R22-301	0.5-2	100	NO	1	1.5:1	60	+5, -12	0.25	SMAF
R22-301	0.5-2	100	0.1W	1	1.6:1	60	+5, -12	1.3	SMAF
R22-202	0.5-18	100	NO	1	2.2:1	55	+5, -12	3.0	SMAF
R22-301	2-12	100	NO	1	1.7:1	60	+5, -12	2.0	SMAF
R22-302	2-12	100	0.1W	1	1.7:1	60	+5, -12	2.3	SMAF
R22-401	2-18	100	NO	1	1.8:1	60	+5, -12	2.7	SMAF
R22-402	2-18	100	0.1W	1	1.8:1	60	+5, -12	3.0	SMAF

SURFACE MOUNT HIGH POWER PIN DIODE SWITCHES

These tiny high power switches are built on ceramic substrate in our unique Therm-Master™ surface mount package. The package size is 0.54" x 0.66" x 0.14". Typical applications include T/R switches, and antenna or amplifier selection diversity switching in radars, radios, IFF, data links, and GSM or CDMA base stations.

Model No.	Frequency (MHz)	Config	Power Peak (watts)	Power Average (watts)	Pulse Width (µS)	Loss (dB)	Isolation (dB)	Speed to 0.5 dB (nanosec)
ADS22-149	900-1800	SPDT	1000	60	7	0.7	30	600
ADS22-151	1025-1095	SPDT	900	27	34	0.55	25	330
ADS42-409	500-1400	SP4T	300	30	6	0.6	34	500
ADS42-410	960-1215	SP4T	500	50	13	0.5	25	440
ADS41-421	400-500	SP4T	100	25	40	0.4	20	500
ADS20-450	500-1000	SPDT	6	6	100	0.5	25	150

ENVIRONMENTAL & CONVERSION CHARTS

POWER - CONVERSION CHART

dBm (mW)	dBm (W)
-20 = .010	+20 = .100
-19 = .012	+21 = .120
-18 = .016	+22 = .159
-17 = .020	+23 = .200
-16 = .025	+24 = .251
-15 = .032	+25 = .316
-14 = .040	+26 = .398
-13 = .050	+27 = .501
-12 = .063	+28 = .631
-11 = .079	+29 = .794
-10 = .100	+30 = 1.00
-9 = .130	+31 = 1.26
-8 = .160	+32 = 1.59
-7 = .200	+33 = 2.00
-6 = .250	+34 = 2.55
-5 = .316	+35 = 3.16
-4 = .398	+36 = 3.91
-3 = .501	+37 = 5.01
-2 = .63	+38 = 6.31
-1 = .794	+39 = 7.94
0 = 1.00	+40 = 10.0
+1 = 1.25	+41 = 12.6
+2 = 1.58	+42 = 15.8
+3 = 2.00	+43 = 20.0
+4 = 2.51	+44 = 25.1
+5 = 3.16	+45 = 31.6
+6 = 3.98	+46 = 39.8
+7 = 5.01	+47 = 50.1
+8 = 6.30	+48 = 63.1
+9 = 7.94	+49 = 79.4
+10 = 10.0	+50 = 100
+11 = 12.6	+51 = 126
+12 = 15.8	+52 = 158
+13 = 19.9	+53 = 200
+14 = 25.1	+54 = 251
+15 = 31.6	+55 = 316
+16 = 39.8	+56 = 398
+17 = 50.1	+57 = 501
+18 = 63.1	+58 = 631
+19 = 79.4	+59 = 794
	+60 = 1KW

ENVIRONMENTAL - TABLE 1 (MODULES)

Temperature:
 • Operating 0°C to 71°C, baseplate
 • Non-operating..... -40°C to + 85°C
 Altitude:
 • Operating 10,000 feet
 • Non-operating..... 40,000 feet
 Humidity 95% non-condensing
 Shock & Vibration Normal conditions encountered in truck transportation

ENVIRONMENTAL - TABLE 2 (RACK MOUNTED)

Temperature:
 • Operating 0°C to 50°C, ambient
 • Non-operating..... -40°C to + 85°C
 Altitude:
 • Operating 10,000 feet
 • Non-operating..... 40,000 feet
 Humidity 95% non-condensing
 Shock MIL-STD-810C, method 516.2, procedure I, 15G, 11 msec 1/2 sine
 Vibration MIL-STD-810C, method 514.2, procedure VIII, curve V, 1hr/axis

ENVIRONMENTAL - TABLE 3 (SWITCHES/LIMITERS)

Operating Temp Range 0° to +60°C (Baseplate)
 Storage -55° to +85°C
 Vibration & Shock Ground Transport
 Burn-in 48 Hrs at +60°C minimum
 Altitude 15,000 feet

EFFECT OF VSWR ON TRANSMITTED POWER

VSWR	Return Loss (dB)	Trans Loss (dB)	Volt Refl. Coeff.	Power Refl. (%)	Power Trans (%)
1.00	∞	.000	.00	.0	100.0
1.01	46.1	.000	.00	.0	100.0
1.02	40.1	.000	.01	.0	100.0
1.03	36.6	.001	.01	.0	100.0
1.04	34.2	.002	.02	.0	100.0
1.05	32.3	.003	.02	.1	99.9
1.06	30.7	.004	.03	.1	99.9
1.07	29.4	.005	.03	.1	99.9
1.08	28.3	.006	.04	.1	99.9
1.09	27.3	.008	.04	.2	99.9
1.10	26.4	.010	.05	.2	99.8
1.11	25.7	.012	.05	.3	99.7
1.12	24.9	.014	.06	.3	99.7
1.13	24.3	.016	.06	.4	99.6
1.14	23.7	.019	.07	.4	99.6
1.15	23.1	.021	.07	.5	99.5
1.16	22.6	.024	.07	.5	99.5
1.17	22.1	.027	.08	.6	99.4
1.18	21.7	.030	.08	.7	99.3
1.19	21.2	.033	.09	.8	99.2
1.20	20.8	.036	.09	.8	99.2
1.25	19.1	.054	.11	1.2	98.8
1.30	17.7	.075	.13	1.7	98.3
1.40	15.6	.122	.17	2.8	97.2
1.50	14.0	.177	.20	4.0	96.0
1.60	12.7	.238	.23	5.3	94.7
1.70	11.7	.302	.26	6.7	93.3
1.80	10.9	.370	.29	8.2	91.8
1.90	10.2	.440	.31	9.6	90.4
2.00	9.50	.512	.33	11.1	88.9
3.00	6.00	1.24	.50	25.0	75.0
4.00	4.40	1.93	.60	36.0	64.0
5.00	3.50	2.55	.67	44.4	55.6
10.0	1.70	4.80	.82	66.9	33.1
20.0	.900	7.41	.90	81.9	18.1

PROTOCOLS

These are the current hardware protocols used for remotely controlling any of our products, some are standard, some optional. Other customer specified interfaces can also be implemented.

- Ethernet (TCP/IP, UDP, HTTP, SMTP)
- IEEE-488
- RS-232
- RS-485
- RS-422 (Serial)
- RS-422 (Discrete)

APPLICATIONS

Comtech develops control applications for both in-house and customer specified use. These applications work in conjunction with our many ATE Test Stations.

- National Instruments Measurement Studio
- National Instruments LabView
- National Instruments CVI
- Visual Basic
- C
- C++
- JAVA
- HTML
- Hewlett Packard VEE

LRU FEATURES

Listed below are standard features within our product-line. This list can be expanded upon, based on specific customer requirements.

- Filter/Band Switching,
- Transmitted Power Monitoring,
- Transistor/Module Current Monitoring
- Thermal, Overcurrent, VSWR, ...etc – Fault Detection.
- Power Control
- Modulation Selection, AM, FM, SSB, ...etc.
- Transmit/Receive modes
- Noise Quiet
- Standby/ Operate

TECHNOLOGIES

Comtech employs a broad range of the latest technologies within their product line

- ATE
- CPLD's
- Embedded Ethernet
- Digital ALC
- Fast Frequency Hopping Controls
- Fiber Optic Links

COMTECH/PST DIGITAL DESIGN AND SOFTWARE DEVELOPMENT CAPABILITIES

All of our rack-mounted amplifier systems are available with all of today's remote control interface options. This allows seamless integration with your automated test or remote applications.

We offer the following interfaces for remote control of our equipment: IEEE-488, RS-232, RS-422 and RS-485. In addition, custom parallel or serial interfaces may also be incorporated based on your specific application. Comtech PST can now offer our new Ethernet interface with TCP/IP stack. Configure your amplifier with an IP address and use an application similar to the one shown below, and give your system "Internet Appliance" capability. This feature allows for monitoring and control of our amplifier systems over the Internet.

Working in conjunction with these remote control protocols, our Software Development group can design custom PC applications to make your testing and/or control requirements totally automated, featuring control, data acquisition, analysis and presentation.

For further information on Comtech PST's products and custom design capabilities, please visit our website, or contact us directly.

www.comtechpst.com

Solid State Power Amplifiers
 (631) 777-8900
sales@comtechpst.com

Solid State Control Devices
 (978) 887-5754
sales@hilleng.com





Comtech PST Corporation
105 Baylis Road
Melville, NY 11747
USA

Telephone: +1 (631) 777-8900
Fax: +1 (631) 777-8877
E-mail: sales@comtechpst.com
Web: www.comtechpst.com

Comtech PST Corp./Hill Engineering
417 Boston Road
Topsfield, MA 01983

Telephone: +1 (978) 887-5754
Fax: +1 (978) 887-7244
E-mail: sales@hilleng.com
Web: www.comtechpst.com

