

## Product Datasheet - Technical Specifications



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The product range comprises multiple types of broadband solid-state amplifiers, like low noise amplifiers, medium power driving amplifiers, high power amplifiers, waveguide amplifiers, etc, which can be widely used in the fields like testing and ECM.

- The products include amplifier modules and complete sets
- Broadband with frequency up to 100GHz
- GaAs or GaN for design
- Adopting planar and space synthesis techniques, max. output power reaches 50W
- Can tailor modules and complete sets as per customers' requirements

## Low noise amplifier

Model	Frequency range [GHz]	Gain [dBm]	Noise Figure [dB Max]	P1dB [dBm Typ]	Power Supply [Typ]	Connector Type	Case Type
AV80234	0.01...2	25	1.7	15	165mA@+8V	SMA (f)	AMP1
AV80230	2...20	25	4	12	130mA@+8V	3.5mm (f)	AMP1
AV80231	18...26.5	30	4	10	130mA@+8V	3.5mm (f)	AMP1
AV80232	26.5...40	30	4	10	270mA@+8V	2.4mm (f)	AMP1
AV70214	84...100	14	6	1	50mA@+2V @-0.8V...+0.4V	WR10	AMP9

## Broadband driving amplifier

Model	Frequency range [GHz]	Gain [dBm]	Noise Figure [dB Max]	P1dB [dBm Typ]	Psat [dBm Min]	Power Supply [Typ]	Connector Type	Case Type
AV80210	1...26.5	10	8	19	20	300mA@+8V	3.5mm (f)	AMP1
AV80211	1...26.5	20	7	19	20	400mA@+8V	3.5mm (f)	AMP1
AV80212	1...26.5	25	7	19	20	500mA@+8V	3.5mm (f)	AMP1
AV80214	0.045...26.5	25	12	19	20	500mA@+8V	3.5mm (f)	AMP1
AV80220	1...40	10	11	14	16	250mA@+8V	2.4mm (f)	AMP1
AV80221	1...40	25	10	14	16	500mA@+8V	2.4mm (f)	AMP1
AV80223	0.045...40	25	12	14	16	500mA@+8V	2.4mm (f)	AMP1
AV80240	0.8...20	23	8	25	27	600mA@+8V	3.5mm (f)	AMP1
	20...26.5	20	10	21	23			
AV80241	0.045...20	21	8	24	25	600mA@+8V	3.5mm (f)	AMP1
	20...26.5	20	10	19	20.5			
AV80242	26.5...40	33	7	19	21	600mA@+8V	2.4mm (f)	AMP1

## Broadband power amplifier

Model	Frequency range (GHz)	Gain (dBm)	Noise Figure (dB Max)	P1dB (dBm Typ)	Psat (dBm Min)	Psat (dBm Typ)	IP3 (dBm Typ)	Power Supply (Typ)	Connector Type	Case Type
AV80244	0.05...3	30	6	31	33	35	41	0.8A@+26V	SMA (f)	AMP4
AV80246	0.8...20	32	5	29	30	31	37	1.3A@+10V	3.5mm (f)	AMP3
AV80243	0.8...20	28	7	30	31	32	40	2.6A@+10V	3.5mm (f)	AMP5
AV80243B	2.0...50	12	-	16	18	20	-	0.4A@+9V	2.4mm (f)	AMP3
AV80248	6...18	32	4	33.5	33.5	34.5	37	1.4A@+9V	3.5mm (f)	AMP3
AV80249	6...18	32	5	34	35	36	39	2.6A@+9V	3.5mm (f)	AMP3
AV80253	18...26.5	29	7	28	29	30	38	1.5A@+9V	3.5mm (f)	AMP3
AV80254	18...26.5	30	7	30	31	33	40	4A@+9V	3.5mm (f)	AMP3
AV80255	18...40	23	10	22	23	24	34	0.8A@+9V	2.4mm (f)	AMP3
AV80255C									2.92mm (f)	
AV80264	18...40	22	10	24	25	26	36	1.5A@+9V	2.4mm (f)	AMP3
AV80264C									2.92mm (f)	
AV80256	20...40	25	10	24	25	26	35	1.2A@+9V	2.4mm (f)	AMP3
AV80256C									2.92mm (f)	
AV80257	24...31	32	8.5	32	33	34	40	3A@+7.5V	2.4mm (f)	AMP3
AV80257C									2.92mm (f)	
AV80259	26.5...31	31	8.5	31	31	32	37.5	2A@+7.5V	2.4mm (f)	AMP3
AV80259C									2.92mm (f)	
AV80261	30...40	30	10	28	29	30	-	2A@+7.5V	2.4mm (f)	AMP3
AV80261C									2.92mm (f)	
AV80262	30...40	31	10	30	30	31	-	5A@+7.5V	2.4mm (f)	AMP3
AV80262C									2.92mm (f)	
AV80262L	40...67	12	-	-	16	17	-	0.3A@+9V	1.85mm (f)	AMP3

## Waveguide amplifier

Model	Frequency range (GHz)	Gain (dB Min)	Noise Figure (dB Typ)	P1dB (dBm Typ)	Psat (dBm Min)	Psat (dBm Typ)	Power Supply (Typ)	Connector Type	Case Type
AV70216	26...40	17	7	29	28.5	30	2200mA@+5V @-0.55V	WR28	AMP7
AV70217	50...66	15	-	19	20.5	22	880mA@+5V @-0.3V	WR15	AMP8
AV70214	84...100	14	5	1	-	-	50mA@+2V @-0.8V...+0.4V	WR10	AMP9
AV70215	92...96	19	-	14.5	15	16.5	200mA@+4V @-0.8V...+0.3V	WR10	AMP9
AV38703A	92...96	12	-	17	18	19	280mA@+4V @-0.8V...+0.4V	WR10	AMP9
AV38703	92...96	20	-	18.5	20	20.5	400mA@+4V@-0.8V...+0.3V	WR10	AMP10

## Compact low-noise amplifier instruments (with power adapter)

Model	Frequency range (GHz)	Gain (dBm)	Noise Figure (dB Max)	P1dB (dBm Typ)	Power Supply (Typ)	Connector Type	Case Type
AV80234A	0.01...2	24	1.7	15	220V/ 50Hz (connect to power adapter)	SMA (f)	AMP13
AV80234B	0.5...6	40	3.5 (Typ: 3)	14		N (f)	
AV80230A	2...20	24	4	12		3.5mm (f)	
AV80231A	18...26.5	29	4	10	12VDC ( $\phi$ 2.5mm DC wiring terminal)	3.5mm (f)	
AV80232A	26.5...40	29	4	10		2.4mm (f)	

## Compact power amplifier instruments (with power adapter)

Model	Frequency range (GHz)	Gain (dBm)	Noise Figure (dB Typ)	P1dB (dBm Typ)	Psat (dBm Min)	Psat (dBm Typ)	IP3 (dBm Typ)	Power Supply (Typ)	Connector Type	Case Type
AV80241A	0.045...20	22	8	24	25	-	-	220V/50Hz (connect to power adapter)	3.5mm (f)	AMP13
	20...26.5	19	10	19	20.5	-	-		2.4mm (f)	
AV80223A	0.045...40	24	12	14	16	-	-		3.5mm (f)	
AV80246A	0.8...20	31	5	29	30	31	37	12VDC ( $\phi$ 2.5mm DC wiring terminal)	3.5mm (f)	
AV80243A	0.8...20	27	7	30	31	32	40		3.5mm (f)	
AV80248A	6...18	31	4	32.5	33.5	34.5	37		3.5mm (f)	
AV80249A	6...18	31	5	34	35	36	39		3.5mm (f)	
AV80253A	18...26.5	28	7	28	29	30	38		3.5mm (f)	
AV80254A	18...26.5	29	7	30	31	32	40		3.5mm (f)	
AV80255A	18...40	22	10	22	23	24	34		2.4mm (f)	
AV80255B									2.92mm (f)	
AV80264A	18...40	21	10	24	25	26	36		2.4mm (f)	
AV80264B									2.92mm (f)	
AV80256A	20...40	24	10	24	25	26	35		2.4mm (f)	
AV80256B									2.92mm (f)	
AV80257A	24...31	31	8.5	32	33	34	40		2.4mm (f)	
AV80257B									2.92mm (f)	
AV80261A	30...40	29	10	28	29	30	-		2.4mm (f)	
AV80261B									2.92mm (f)	
AV80262A	30...40	30	10	29	30	31	-	2.4mm (f)		
AV80262B								2.92mm (f)		

## Portable power amplifier instruments

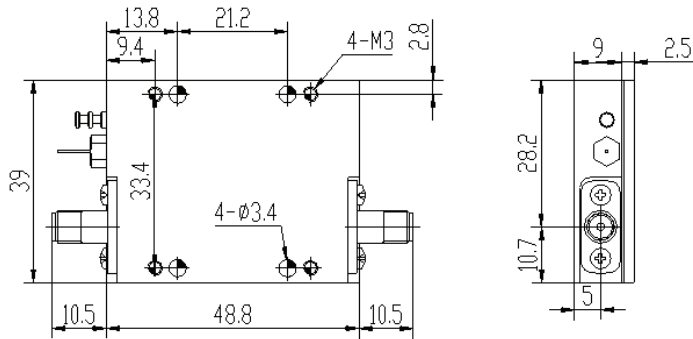
(Display output power, output power external stability)

Model	Frequency range (GHz)	Gain (dB Min)	Noise Figure (dB)	P1dB (dBm Typ)	Psat (dBm Min)	Psat (dBm Typ)	IP3 (dBm Typ)	Connector Type	Power Supply; Case Type
AV3860C	0.8...20	23	8	-	29	30	-	Type N (f)	Power Supply: 220V/50Hz
AV3860D	18...40	22	12	-	20	21	-	2.92mm (f)	
AV3860D	0.01...20	19	8	-	24	25	-	3.5mm (m)	Case Type: AMP11

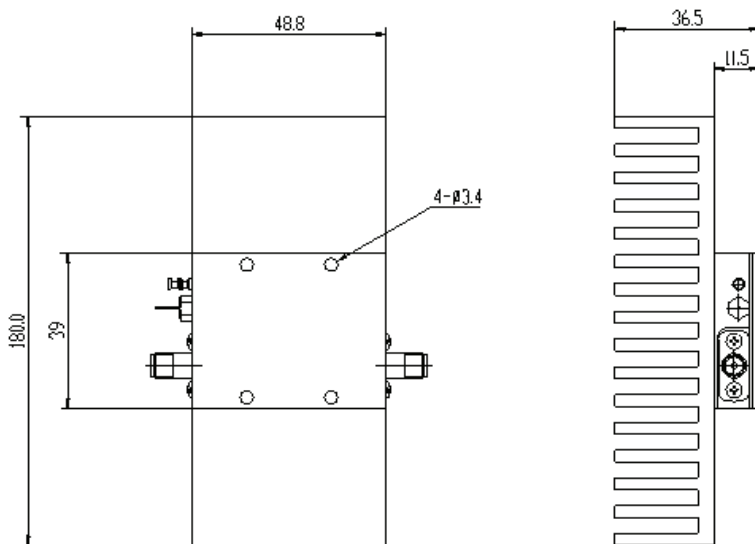
## 4U high-power amplifier instruments

Model	Frequency range (GHz)	Gain (dB Min)	Gain Flatness (dB Max)	P1dB (dBm Typ)	Psat (dBm Min)	Psat (dBm Typ)	Harmonic Rejection @P1dB (dBc Typ)	Connector Type	Power Supply; Case Type
AV38701E	0.8...3	50	±3	38	45	47	20	N (f)	Power Supply: 220V/50Hz
AV38701F	0.5...6	50	±3	38	43	46	20	N (f)	
AV38701F	2...6	50	±3	38	43	46	20	N (f)	
AV38701C	6...18	50	±3	43	43	45	20	N (f)	Case Type: AMP12
AV38701B	18...26.5	45	±3	36	37	40	-	3.5 (m)	
AV38701A	26.5...32	45	±3	36	37	40	-	2.4 (m)	
AV38701	32...40	45	±3	36	37	40	-	2.4 (m)	

## AMP1 amplifier

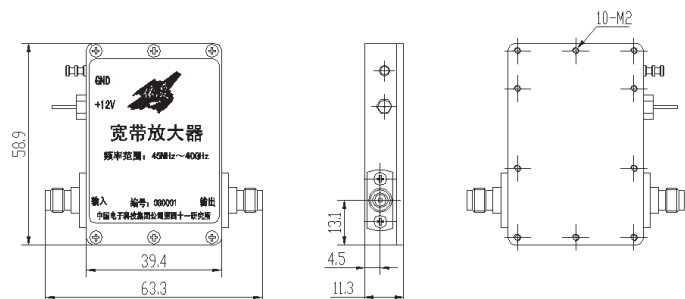


Dimensions of AMP1 power amplifier

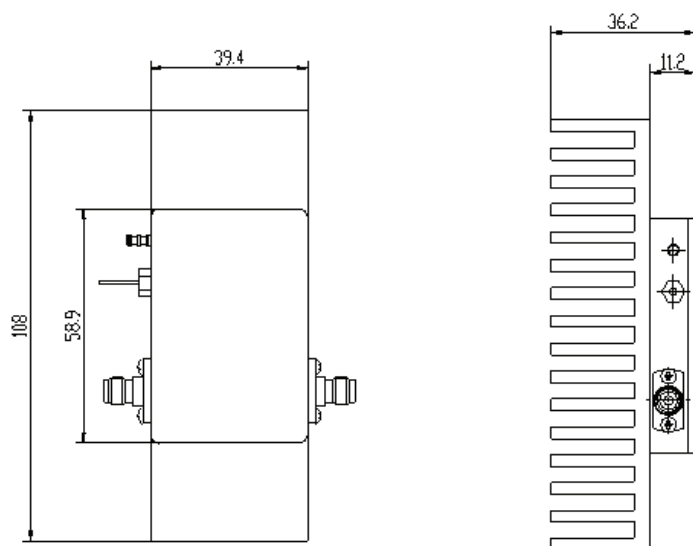


Dimensions of AMP1 power amplifier (with radiator)

## AMP2 amplifier



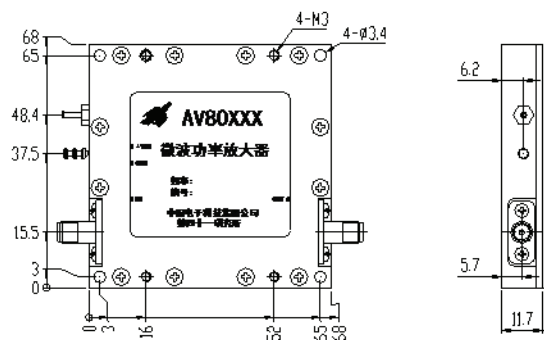
Dimensions of AMP2 power amplifier



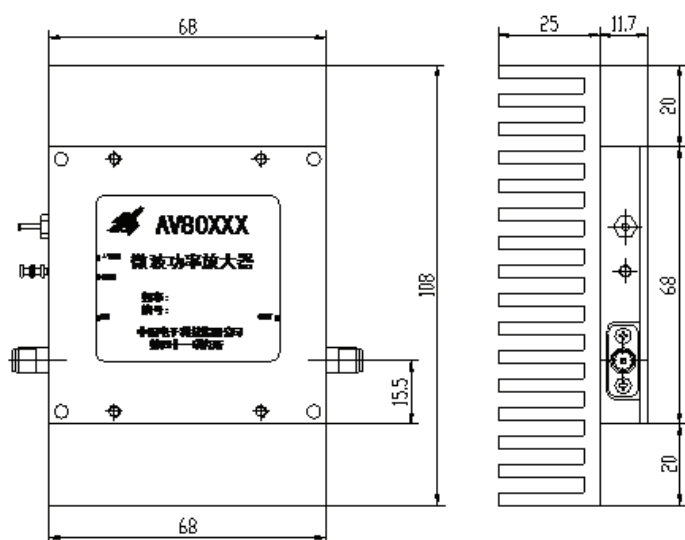
Dimensions of AMP2 power amplifier (with radiator)



## AMP3 amplifier

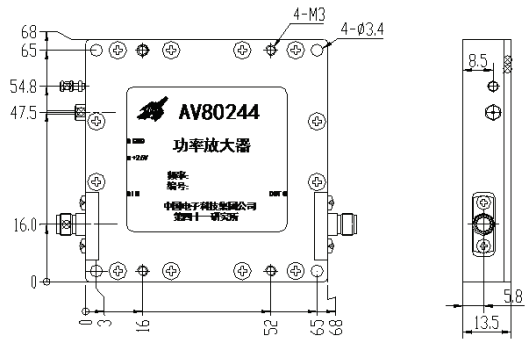


Dimensions of AMP3 power amplifier

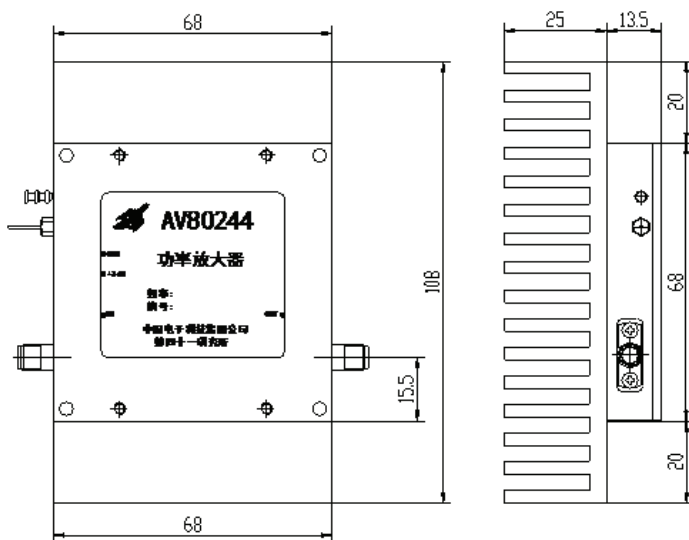


Dimensions of AMP3 power amplifier (with radiator)

## AMP4 amplifier

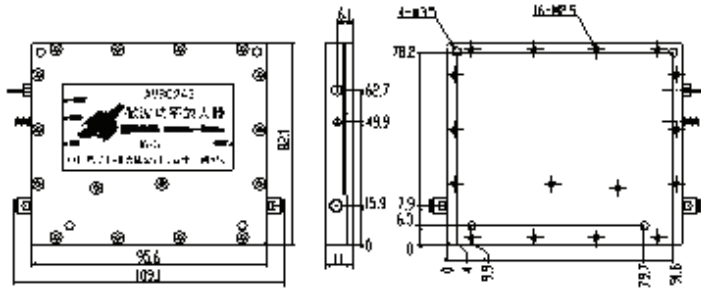


Dimensions of AMP4 power amplifier

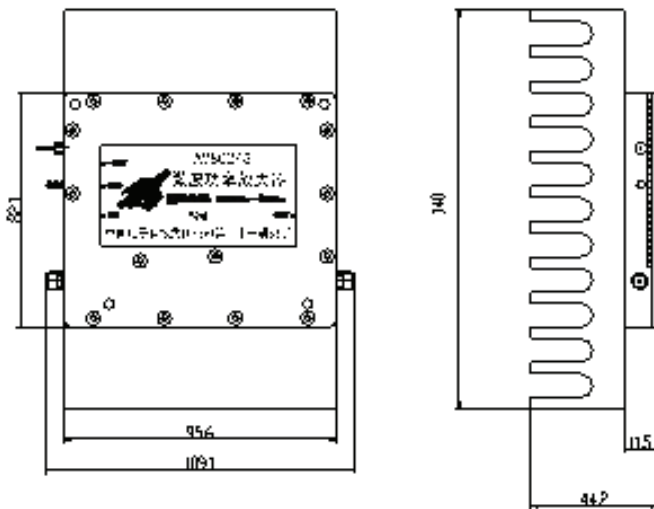


Dimensions of AMP4 power amplifier (with radiator)

## AMP5 amplifier

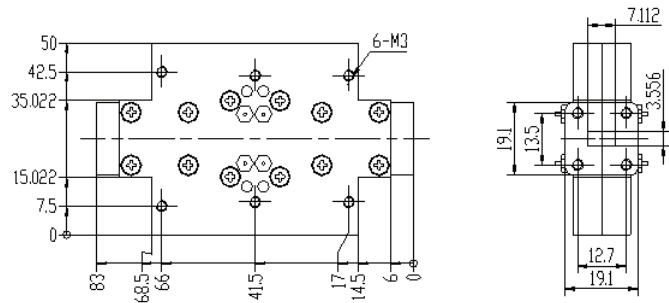


Dimensions of AMP5 power amplifier

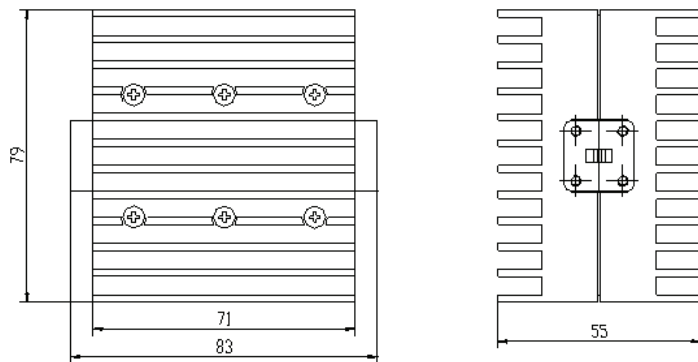


Dimensions of AMP5 power amplifier (with radiator)

## AMP7 amplifier

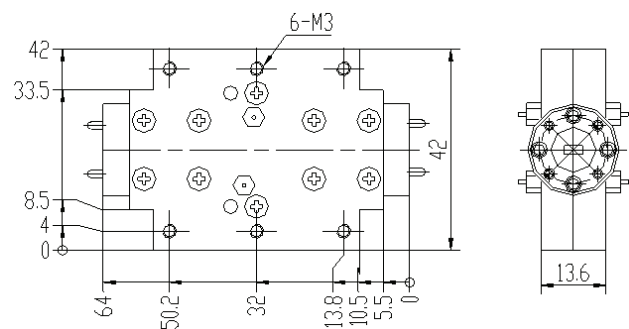


Dimensions of AMP7 power amplifier

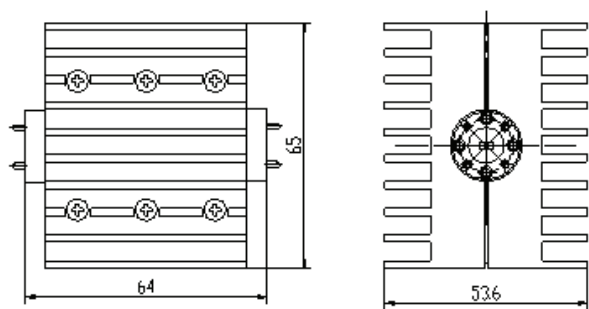


Dimensions of AMP7 power amplifier (with radiator)

## AMP8 amplifier

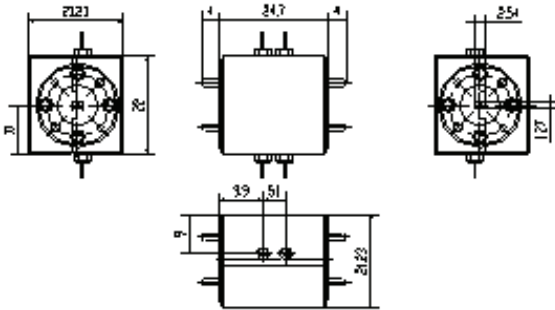


Dimensions of AMP8 power amplifier



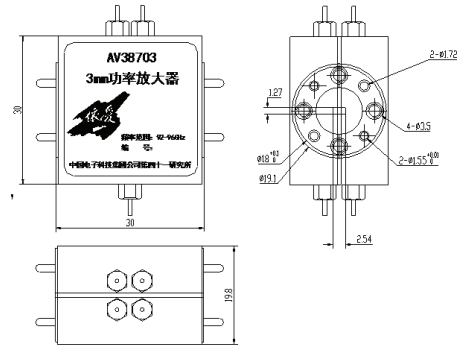
Dimensions of AMP8 power amplifier (with radiator)

## AMP9 amplifier



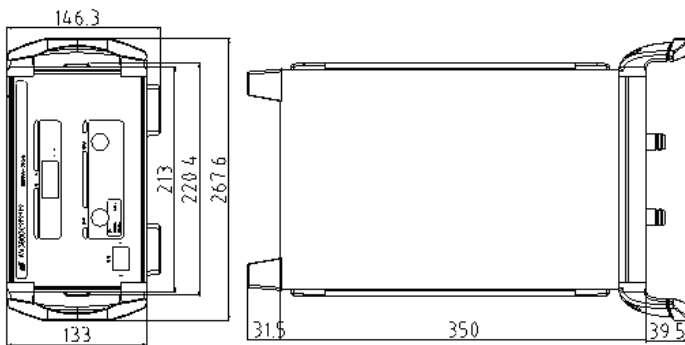
Dimensions of AMP9 power amplifier

## AMP10 amplifier



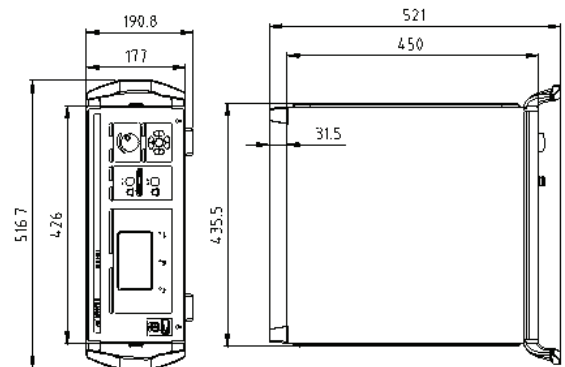
Dimensions of AMP10 power amplifier

## AMP11 amplifier



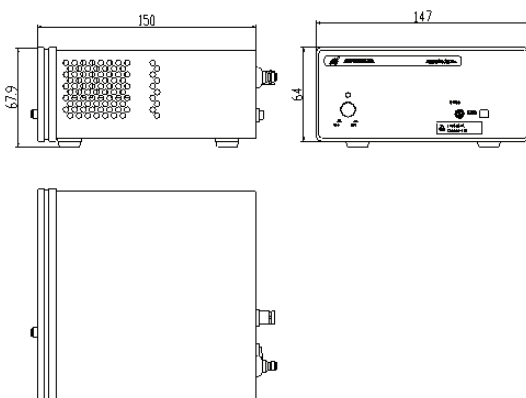
Dimensions of AMP11 power amplifier

## AMP12 amplifier



Dimensions of AMP12 power amplifier

## AMP13 amplifier



Dimensions of AMP13 power amplifier