

# Appendix B

## Amplifiers Selection Table

Part Number	Description	Supply	Supply Volts Min to Max	Gain Setting Method	Gain Range Min to Max
AD522	In-amp	Dual	$\pm 5$ to $\pm 18$	Resistor	1 to 1000
AD524	Precision IA	Dual	$\pm 6$ to $\pm 18$	Pin select	1 to 1000
AD526	Software-programmable amp	Dual	$\pm 4.5$ to $\pm 16.5$	Software	1 to 16
AD620	General-purpose IA	Dual	$\pm 2.3$ to $\pm 18$	Resistor	1 to 10,000
AD621	Precision IA	Dual	$\pm 2.3$ to $\pm 18$	Pin select	10 and 100
AD622	Low cost IA	Dual	$\pm 2.6$ to $\pm 18$	Resistor	1 to 1000
AD623	Single-supply, rail-to-rail IA	Both	2.7 to 12	Resistor	1 to 1000
AD624	Precision IA	Dual	$\pm 6$ to $\pm 18$	Pin select	1 to 1000
AD625	Programmable gain IA	Dual	$\pm 6$ to $\pm 18$	3 resistors	1 to 10,000
AD626	Differential amp	Both	2.4 to 12	Pin select	10 and 100
AD627	Micropower IA	Both	2.2 to 36	Resistor	5 to 1000
AD628	High CMV DA	Both	4.5 to 36	Pin/resistor	0.1 to 100
AD629	High CMV DA	Dual	$\pm 2.5$ to $\pm 18$	Fixed	G = 1
AD8202	High CMV DA	Single	3.5 to 12	Fixed	G = 20
AD8203	High CMV DA	Single	3.5 to 13	Fixed	G = 14
AD8205	Single-supply differential amp	Single	4.5 to 5.5	Fixed	G = 50
AD8206	Single-supply differential amp	Single	4.5 to 5.5	Fixed	G = 20
AD8210	Differential amp	Single	4.5 to 5.5	Fixed	G = 20
AD8212	Current sense amp	Single	7 to 65	Resistor	Adjustable
AD8213	Dual, current sense amp	Dual	4.5 to 5.5	Fixed	Gain = 20
AD8220	Rail-to-rail JFET IA	Dual	$\pm 2.3$ to $\pm 18$	Resistor	1 to 1000
AD8221	High performance IA	Dual	$\pm 2.3$ to $\pm 18$	Resistor	1 to 1000
AD8221	BR grade specifications	Dual	$\pm 2.3$ to $\pm 18$	Resistor	1 to 1000
AD8222	High performance IA	Dual	$\pm 2.3$ to $\pm 18$	Resistor	1 to 1000
AD8225	Fixed G = 5 IA	Dual	$\pm 1.7$ to $\pm 18$	Fixed	G = 5
AD8230	Zero drift IA	Both	8 to 16	Resistor	2 to 1000
AD8250	Software-programmable, 10 MHz	Dual	$\pm 5$ to $\pm 15$	Software	G = 1, 2, 5, 10
AD8251	Software-programmable, 10 MHz	Dual	$\pm 5$ to $\pm 15$	Software	G = 1, 2, 4, 8
AD8553	Zero drift IA	Single	1.8 to 5.5	Resistor	0.1 to 10,000
AD8555	Sensor amp	Single	2.7 to 5.5	Software	70 to 1280
AD8556	Sensor/filter amp	Single	2.7 to 5.5	Software	70 to 1280
AMP03	Precision differential amp	Dual	$\pm 6$ to $\pm 18$	Fixed	G = 1

**Amplifiers Selection Table (continued)**

<b>Part Number</b>	<b>CMRR at 60 Hz G = 1, G = 1000 Min</b>	<b>Bandwidth G = 10 Typ</b>	<b>V<sub>NOISE</sub> p-p RTI 1 to 10 Hz Typ G = 100</b>	<b>Input Offset Voltage</b>	<b>Temperature Range (°C)</b>
AD522	75 dB <sup>1</sup> , 100 dB <sup>2</sup>	3 kHz <sup>3</sup>	4 μV	400 μV	-55 to +125
AD524	70 dB, 110 dB	400 kHz	0.3 μV	250 μV	-55 to +125
AD526	N/A	350 kHz <sup>4</sup>	3 μV	1500 μV	-40 to +85
AD620	73 dB, 110 dB	800 kHz	0.28 μV	125 μV	-55 to +125
AD621	93 dB, 110 dB <sup>5</sup>	800 kHz	0.28 μV	125 μV <sup>6</sup>	-55 to +125
AD622	66 dB, 103 dB	800 kHz	0.3 μV	125 μV	-40 to +85
AD623	70 dB, 105 dB	100 kHz	2 μV	200 μV	-40 to +85
AD624	70 dB, 110 dB <sup>7</sup>	400 kHz	0.3 μV	200 μV	-55 to +125
AD625	70 dB, 110 dB	400 kHz	0.3 μV	200 μV	-40 to +85
AD626	55 dB <sup>5</sup>	100 kHz	2 μV	2500 μV	-40 to +85
AD627	77 dB <sup>8</sup>	30 kHz	1.2 μV <sup>8</sup>	200 μV	-40 to +85
AD628	75 dB	600 kHz	15 μV	1500 μV	-40 to +85
AD629	77 dB	500 kHz	15 μV	1000 μV	-40 to +85
AD8202	82 dB <sup>9</sup>	50 kHz <sup>9</sup>	10 μV <sup>9</sup>	1000 μV	-40 to +125
AD8203	82 dB <sup>10</sup>	60 kHz <sup>10</sup>	10 μV <sup>10</sup>	1000 μV	-40 to +125
AD8205	78 dB <sup>11, 12</sup>	50 kHz <sup>12</sup>	15 μV <sup>12</sup>	2000 μV	-40 to +125
AD8206	76 dB <sup>9, 11</sup>	100 kHz <sup>9</sup>	15 μV <sup>12</sup>	2000 μV	-40 to +125
AD8210	100 dB <sup>9</sup>	500 kHz <sup>9</sup>	8 μV	1000 μV	-40 to +150
AD8212	90 dB <sup>13</sup>	450 kHz <sup>9</sup>	15 μV <sup>12</sup>	1000 μV	-40 to +125
AD8213	90 dB <sup>13</sup>	450 kHz <sup>9</sup>	10 μV <sup>12</sup>	2000 μV	-40 to +125
AD8220	90 dB <sup>13</sup> , 116 dB <sup>13</sup>	1 MHz	0.8 μV	0.8 μV	-40 to +85
AD8221	80 dB, 130 dB	562 kHz	0.25 μV	60 μV	-40 to +125
AD8221	90 dB, 140 dB	562 kHz	0.25 μV	25 μV	-40 to +125
AD8222	80 dB, 130 dB	750 kHz	0.25 μV	120 μV	-40 to +85
AD8225	86 dB <sup>8</sup>	900 kHz <sup>8</sup>	1.5 μV <sup>8</sup>	325 μV	-40 to +85
AD8230	110 dB <sup>14</sup>	2 kHz	3 μV	10 μV	-40 to +125
AD8250	80 dB, 100 dB	10,000 kHz	0.4 μV	100 μV	-40 to +125
AD8251	80 dB, 100 dB	10,000 kHz	0.4 μV	100 μV	-40 to +125
AD8553	100 dB, 120 dB <sup>15</sup>	1 kHz	0.7 μV	20 μV	-40 to +85
AD8555	80 dB <sup>16</sup> , 96 dB <sup>17</sup>	700 kHz <sup>16</sup>	0.5 μV	10 μV	-40 to +125
AD8556	80 dB <sup>16</sup> , 94 dB <sup>17</sup>	700 kHz <sup>16</sup>	0.5 μV	10 μV	-40 to +140
AMP03	85 dB <sup>18</sup>	3000 kHz <sup>18</sup>	2 μV <sup>18</sup>	400 μV <sup>18</sup>	-40 to +85

NOTES

<sup>1</sup>DC to 30 Hz

<sup>2</sup>DC to 1 Hz

<sup>3</sup>Min BW at G = 100

<sup>4</sup>Typ BW at G = 16

<sup>5</sup>CMRR at gains of 10 and 100

<sup>6</sup>Total offset voltage RTI at G = 100

<sup>7</sup>At Gain = 500

<sup>8</sup>At Gain = 5

<sup>9</sup>At Gain = 20

<sup>10</sup>At Gain = 14

<sup>11</sup>DC to 20 kHz

<sup>12</sup>At Gain = 50

<sup>13</sup>Typical

<sup>14</sup>At Gain of 10 to 1000

<sup>15</sup>At Gain = 100

<sup>16</sup>At Gain = 70

<sup>17</sup>At Gain = 1280

<sup>18</sup>At Gain = 1