



I Medical & Industrial
solation
A mplifiers

 **intronics**

CALL TOLL FREE 1-800-367-0004

IA175 ULTRA-LINEAR ISOLATION AMPLIFIER WITH EXTERNAL SYNC CAPABILITY

Fully Compatible with 12-Bit Acquisition Systems

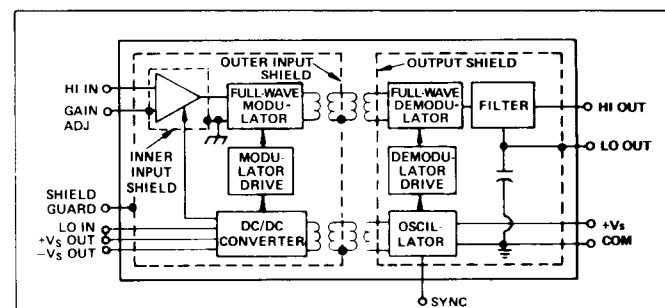


FEATURES

- UL Component Recognized
- Provision for External Synchronization
- High Linearity: 0.005% Peak, Typical
- High Input/Output Isolation: 5000VDC continuous, 3000VAC RMS
- 1000:1 Programmable Gain
- Low Drift: $\pm 0.01\%/^{\circ}\text{C}$ Maximum
- 126dB Common-Mode Rejection

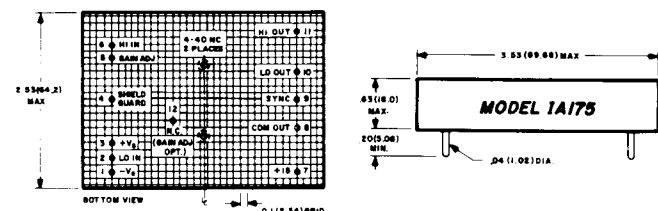
The Model IA175 Isolation Amplifier features very high linearity, input/output isolation, and common-mode rejection, very low drift, and externally programmable gain. Its 0.005% linearity assures compatibility with 12-bit data acquisition systems, and its ability to operate at common-mode input voltages up to 5000 VDC enables operation with single sources in high voltage systems and other hazardous locations. Common-mode rejection is at least 120 dB with source imbalance of up to 5000 ohms. Input voltage noise is $1\mu\text{V}$, 10Hz to 1 kHz, and current noise is 10 pA for the same range. The gain of the amplifier is programmable from 1V/V to 1000V/V by means of an externally connected resistance value. The internal oscillator used to provide modulation and demodulation for input isolation can be synchronized with those of associated Model IA175 amplifiers by means of an external trigger, to avoid imposition of beat-frequency phenomena on the output signals. An independent $\pm 14\text{VDC}$, $\pm 15\text{ mA}$ supply in the input section, with the same voltage isolation as the amplifier input, is used to power an external transducer, or preamplifier.

BLOCK DIAGRAM IA175



CONNECTION NOTES:

1. Gain Adjustment Resistor (R_G) is connected between GAIN and LO-IN pins.
2. If no output-offset adjustment is required, connect LO-OUT to COMMON pin. Otherwise, consult factory.



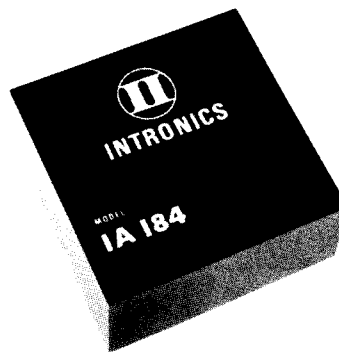
CHARACTERISTICS

(Typical, @ 25°C, $V_S = +15\text{ VDC}$ unless otherwise noted.)

GAIN (Non-Inverting)	
Range	1 to 1000V/V
Formula	$1 + (30\text{k}\Omega/\text{R}_G)$
Deviation from Formula	$\pm 1\%$
vs. Temperature (0 to +70°C)	$\pm 0.005\%/^{\circ}\text{C}$
vs. Temperature (0 to +70°C)	$\pm 0.01\%/^{\circ}\text{C}$ max.
Nonlinearity, $\pm 5\text{V}$ Output	$\pm 0.01\%$ max.
Nonlinearity, $\pm 10\text{V}$ Output	$\pm 0.02\%$ max.
INPUT VOLTAGE RATINGS	
Linear Differential Range	$\pm 10\text{V}$ min.
Max. Safe Differential Input rms.	
Continuous	125V rms
Peak Pulse, 5 ms Duration, One Pulse/Sec	$\pm 600\text{V}$
Max. CMV, Inputs to Outputs/Power Common	
Peak AC, 60 HZ, 1 Minute	3,000V
Peak DC Continuous	$\pm 5,000\text{V}$
CMR, Inputs to Outputs, 60 Hz	
Balanced Source Impedance	126dB
5k Ω Source Imbalance	120dB
CMR, Inputs to Guard, 60 Hz	
5k Ω Source Imbalance	80dB
Max. Leakage Current, Inputs to Common	
115 VAC, 60Hz	8 μA max.
INPUT IMPEDANCE	
Differential	10 Ω 3 pF
Overload	27k Ω
Common Mode	10 Ω 20pf
INPUT BIAS CURRENT	
Initial, @ +25°C	$\pm 2\text{nA}$
vs. Temperature (0 to +70°C)	$\pm 0.01\text{nA}/^{\circ}\text{C}$
INPUT NOISE	
Voltage,	
0.01 Hz to 10Hz	3 μV p-p
10Hz to 1kHz	1 μV rms
Current	
0.01Hz to 10Hz	1pA p-p
FREQUENCY RESPONSE	
Small Signal, -3dB Gain = 100V/V	1kHz
Full Power, 20V p-p Output	500Hz
Slew Rate	30mV/ μs
OFFSET VOLTAGE, REFERRED TO INPUT	
Initial, @ +25°C	$\pm (1 + 5/G)\text{mV}$
vs. Temperature (0 to +70°C)	
Gain = 1V/V ($\mu\text{V}/^{\circ}\text{C}$ max.)	± 35
Gain = 100V/V ($\mu\text{V}/^{\circ}\text{C}$ max.)	± 15
At other Gains ($\mu\text{V}/^{\circ}\text{C}$ max.)	$\pm (15 + 20/G)$
vs. Supply Voltage	$\pm (1 + 20/G)\mu\text{V}/\text{V}$
RATED OUTPUT	
Voltage, 50k Ω Load	$\pm 10\text{V}$ min.
Output Ripple, 20 kHz	10mV p-p
Output Impedance	1.0k Ω
Max. CMV, Output Common to Power Common	
Peak AC or DC Continuous	$\pm 50\text{Vpk}$
ISOLATED POWER CIRCUIT	
Voltage, $\pm 15\text{ mA}$ Load	$\pm 14\text{ VDC}$
Accuracy	$\pm 5\%$
Current	$\pm 15\text{ mA}$ min.
Regulation	
No load to full load	+0, -2%
Δ Gain	$\pm 0.005\%$
Δ Output Offset	$\pm 100\mu\text{V}$
Δ Input Offset	$\pm 5\mu\text{V}$
POWER SUPPLY, SINGLE POLARITY	
Voltage, for rated performance	+15VDC, $\pm 0.5\text{V}$
Voltage, operating	+12 to +18VDC
Current, quiescent	70mA
Current, full load	100mA
External Sync. Frequency	7-8 kHz, 5VDC @ 50% duty cycle
TEMPERATURE RANGE	
Rated Performance	0°C to 70°C
Storage	-55°C to +85°C
CASE DIMENSIONS	
	3.5" x 2.5" x .62"
MATING SOCKET	
	S132
NOMINAL WEIGHT	
	1.3 ounces

IA184 LOW-COST, HIGH-LINEARITY ISOLATION AMPLIFIER WITH EXTERNAL SYNC CAPABILITY

Fully Compatible with 10-Bit Data Acquisition Systems

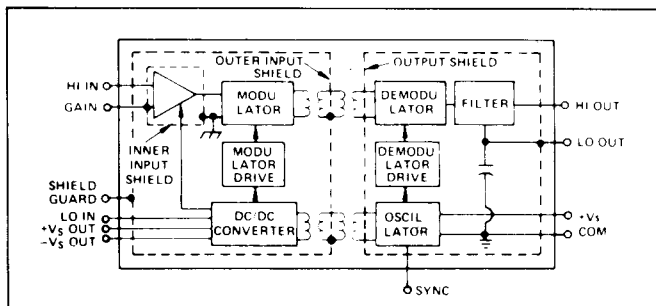


FEATURES

- UL Component Recognized (IA184)
- Provision for External Synchronization
- High Linearity: 0.025% Peak, Typical
- 2500 V Input/Output Isolation
- 126 dB Common-Mode Rejection
- 1000:1 Programmable Gain
- Small Size: only 1.5" x 1.5" x 0.63"

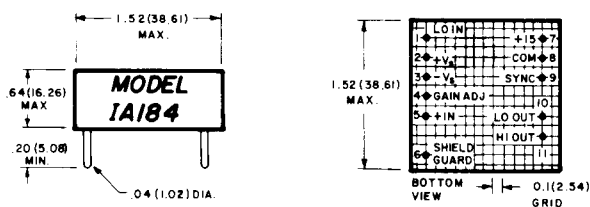
The Model IA184 Isolation Amplifier is an ultra-compact module offering high linearity, 2500-Volt input/output isolation, 126 dB common-mode rejection, externally programmable gain, a floating internal supply for powering an external transducer, and external synchronization of the internal oscillator used in obtaining the input isolation. Its 0.1% linearity assures compatibility with 10-bit data acquisition systems, and input voltage noise is held to $1\mu\text{V}$, 10 Hz to 1 kHz, with 10 pA maximum current noise for the same range. The internal oscillator used to provide modulation and demodulation for input isolation can be synchronized with those of associated Model IA184 amplifiers by an external trigger, to prevent imposition of beat-frequency phenomena on the output signal. An independent $\pm 15\text{ VDC}$, $\pm 15\text{ mA}$ supply in the input section, with the same voltage isolation as the input, can be used to power an external transducer or preamplifier.

BLOCK DIAGRAM IA 184



CONNECTION NOTES:

1. Gain Adjustment Resistor (R_g) is connected between GAIN and LO-IN pins.
2. If no output-offset adjustment is required, connect LO-OUT to COMMON pin. Otherwise, consult factory.



CHARACTERISTICS

(Typical, @ 25°C, $V_s = +15\text{ VDC}$ unless otherwise noted.)
IA184

GAIN (Non-Inverting)	
Range (50k Ω Load)	1 to 1000V/V
Formula	Gain = $(1 + 100k\Omega / R_g)$
Deviation from Formula vs. Temperature (0 to +70°C)	$\pm 3\%$ R_g
Nonlinearity, G = 1V/V to 10V/V	$\pm 0.015\%$ / °C
	@ $\pm 5\text{V}$, $\pm 0.025\%$
	@ $\pm 10\text{V}$, $\pm 0.1\%$
	@ $\pm 10\text{V}$, $\pm 0.2\%$ max.

INPUT VOLTAGE RATING	
Linear Differential Range, G = 1V/V	$\pm 10\text{V}$ min.
Max. Safe Differential Input	125V rms
Continuous	
Pulse, 10ms Duration, 1 pulse/10 sec	$\pm 600\text{Vpk}$ max.
Max. CMV, Inputs to Outputs	2500V rms
AC, 60 Hz, 1 Minute duration	
Pulse, 10ms duration, 1 pulse/10 sec	$\pm 2500\text{Vpk}$ max.
With 510k Ω in series with Guard	
Continuous, AC or DC	$\pm 5000\text{Vpk}$ max.
CMR, Inputs to Outputs, 60 Hz, $R_s < 5k\Omega$	$\pm 2500\text{Vpk}$ max.
Balanced Source Impedance	126dB
5K Ω Source Imbalance	120dB
CMR, Inputs to Guard, 60 Hz	
1k Ω Source Imbalance	80db
Max. Leakage Current, Inputs to Power	
Common @ 115 VAC, 60 Hz	1.2 μA rms max.

INPUT IMPEDANCE	
Differential	$10^9\Omega \parallel 3\text{ pF}$
Overload	27k Ω
Common Mode	$5 \times 10^9\Omega \parallel 20\text{ pF}$

INPUT BIAS CURRENT	
Initial, @ +25°C	$\pm 2\text{ nA}$
vs. Temperature (0 to +70°C)	$\pm 0.01\text{ nA}/^\circ\text{C}$

INPUT NOISE	
Voltage	
0.05 Hz to 10Hz	3 μV
10Hz to 1kHz	1 μV rms
Current	
0.05Hz to 100Hz	5pA p-p
10Hz to 1kHz	10pA rms

FREQUENCY RESPONSE	
Small Signal, -3dB G = 1V/V to 10V/V	
	1kHz
Full Power, 10V p-p Output	
Gain = 1V/V	500Hz
Gain = 10V/V	500Hz
Recovery Time, to $\pm 100\mu\text{V}$ after application of $\pm 600\text{Vpk}$ differential input pulse	
	50ms

OFFSET VOLTAGE, REFERRED TO INPUT	
Initial, @ +25°C	
	$\pm (1 + 5/G)\text{ mV}$
vs. Temperature (0 to +70°C)	
Gain = 1V/V ($\mu\text{V}/^\circ\text{C}$ max.)	± 65
Gain = 100V/V ($\mu\text{V}/^\circ\text{C}$ max.)	± 15
At other Gains ($\mu\text{V}/^\circ\text{C}$ max.)	
	$\pm (15 + 50/G)$
vs. Supply Voltage	
	$\pm (1 + 50/G)\mu\text{V}/\text{V}$

RATED OUTPUT	
Voltage, 50k Ω Load	$\pm 10\text{V}$ min.
Output Impedance	1k Ω
Max. CMV, Output Common to Power Common, Peak AC or DC Continuous	$\pm 50\text{V}$ pk

ISOLATED POWER OUTPUTS	
Voltage, $\pm 5\text{ mA}$ Load	$\pm 15\text{ VDC}$
Accuracy	$\pm 5\%$
Current	$\pm 15\text{ mA}$ min.
Regulation, NL to FL	+0, -3%
Ripple, 100kHz Bandwidth	100mV p-p

POWER SUPPLY, SINGLE POLARITY	
Voltage, Rated Performance	+15VDC, $\pm .5\text{V}$
Voltage, Operating	+ (8 to 15.5) VDC
Current, Quiescent	+20mA
Current, Full Load	50mA
External Sync Freq.	33 to 37 kHz, 5VDC @ 50% duty cycle

TEMPERATURE RANGE	
Rated Performance	0 to +70°C
Storage	-55°C to +85°C

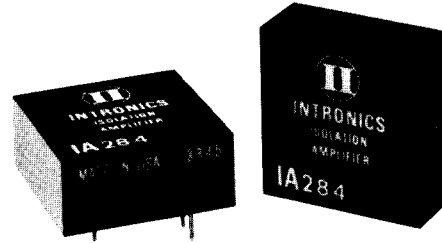
CASE DIMENSIONS	1.5" x 1.5" x 0.62"
------------------------	---------------------

NOMINAL WEIGHT	1.3 ounces
-----------------------	------------

MATING SOCKET	S134
----------------------	------

IA284 LOW COST, HIGH-LINEARITY ISOLATION AMPLIFIER

Fully Compatible with 10-Bit Data Acquisition Systems

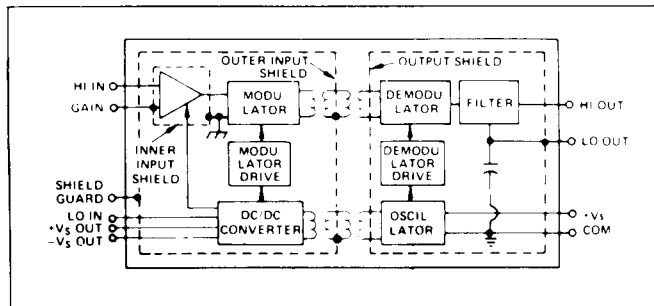


FEATURES

- Linearity: 0.025% Peak, Typical
- 2500 V Input/Output Isolation
- 126 dB Common-Mode Rejection
- 10:1 Programmable Gain

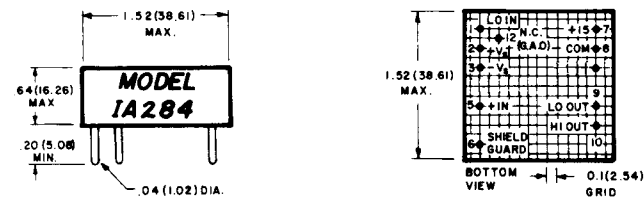
The Model IA284 Isolation Amplifier is an ultra-compact module offering high linearity, 2500-Volt input/output isolation, 126 dB common-mode rejection, programmable gain and a floating internal supply for powering an external transducer. Its .1% linearity assures compatibility with 10-bit data acquisition systems, and input voltage noise is held to 1 V, 10 Hz to 1 kHz, with 10 pA maximum current noise for the same range. An independent ± 15 VDC, ± 15 mA supply in the input section, with the same voltage isolation as the input, can be used to power an external transducer or preamplifier.

BLOCK DIAGRAM IA284



CONNECTION NOTES:

1. Gain Adjustment Resistor (R_g) is connected between GAIN and LO-IN pins.
2. If no output-offset adjustment is required, connect LO-OUT to COMMON pin. Otherwise, consult factory.



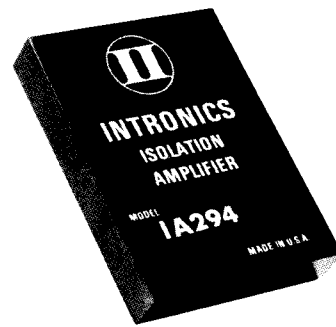
CHARACTERISTICS

(Typical, @ 25°C, $V_S = +15$ VDC unless otherwise noted.)

IA284	
GAIN (Non-Inverting)	
Range (50k Ω Load)	1 to 10 V/V
Formula	Gain = $(1 + \frac{100k\Omega}{10.7k\Omega + R_g})$
Deviation from Formula vs. Temperature (0 to +70°C)	$\pm 3\%$
Nonlinearity, G = 1V/V to 10V/V	$\pm 0.015\%/^{\circ}\text{C}$ @ $\pm 5\text{V}$, $\pm 0.025\%$ @ $\pm 10\text{V}$, $\pm 0.1\%$ @ $\pm 10\text{V}$, $\pm 0.2\%$ max.
INPUT VOLTAGE RATING	
Linear Differential Range, G = 1V/V	$\pm 10\text{V min.}$
Max. Safe Differential Input Continuous	240V rms
Pulse, 10ms Duration, 1 pulse/10 sec	6500V pk max.
Max. CMV, Inputs to Outputs AC, 60 Hz, 1 Minute duration	2500V rms
Pulse, 10ms duration, 1 pulse/10 sec	$\pm 2500\text{Vpk max.}$
With 510k Ω in series with Guard	$\pm 5000\text{Vpk max.}$
Continuous, AC or DC	$\pm 2500\text{Vpk max.}$
CMR, Inputs to Outputs, 60 Hz, $R_s < 5k\Omega$	
Balanced Source Impedance	126dB
5K Ω Source Imbalance	120dB
CMR, Inputs to Guard, 60 Hz	
1k Ω Source Imbalance	80db
Max. Leakage Current, Inputs to Power	
Common @ 115 VAC, 60 Hz	1.2 $\mu\text{A rms max.}$
INPUT IMPEDANCE	
Differential	10 Ω 30pF
Overload	390k Ω
Common Mode	5 x 10 $^{-10}\Omega$ 20 pF
INPUT DIFFERENCE CURRENT	
Initial, @ +25°C	$\pm 2\text{nA}$
vs. Temperature (0 to +70°C)	$\pm 0.01\text{nA}/^{\circ}\text{C}$
INPUT NOISE	
Voltage	
0.05 Hz to 10Hz	8 μV
10Hz to 1kHz	10 $\mu\text{V rms}$
Current	
0.05Hz to 100Hz	5pA p-p
10Hz to 1kHz	10pA rms
FREQUENCY RESPONSE	
Small Signal, -3dB G = 1V/V to 10V/V	1kHz
Full Power, 10V p-p Output	
Gain = 1V/V	500Hz
Gain = 10V/V	500Hz
Recovery Time, to $\pm 100\mu\text{V}$ after application of $\pm 600\text{Vpk}$ differential input pulse	50ms
OFFSET VOLTAGE, REFERRED TO INPUT	
Initial, @ +25°C	$\pm (1 + 5/G)\text{mV}$
vs. Temperature (0 to +70°C)	
Gain = 1V/V ($\mu\text{V}/^{\circ}\text{C max.}$)	± 65
Gain = 100V/V ($\mu\text{V}/^{\circ}\text{C max.}$)	± 15
At other Gains ($\mu\text{V}/^{\circ}\text{C max.}$)	$\pm (15 + 50/G)$
vs. Supply Voltage	$\pm (1 + 50/G)\mu\text{V}/\text{V}$
RATED OUTPUT	
Voltage, 50k Ω Load	$\pm 10\text{V min.}$
Output Impedance	1k Ω
Max. CMV, Output Common to Power Common, Peak AC or DC Continuous	$\pm 50\text{V pk}$
ISOLATED POWER OUTPUTS	
Voltage, ± 5 mA Load	± 15 VDC
Accuracy	$\pm 5\%$
Current	± 15 mA min.
Regulation, NL to FL	+0, -15%
Ripple, 100kHz Bandwidth	100mV p-p
POWER SUPPLY, SINGLE POLARITY	
Voltage, Rated Performance	+15 VDC, $\pm .5\text{V}$
Voltage, Operating	(8 to 15.5) VDC
Current, Quiescent	+20mA
TEMPERATURE RANGE	
Rated Performance	0 to +70°C
Storage	-55°C to +85°C
CASE DIMENSIONS	1.5" x 1.5" x 0.62"
NOMINAL WEIGHT	1.3 ounces
MATING SOCKET	S134

IA294

MEDICAL ISOLATION AMPLIFIER LOW NOISE, WITH ACTIVE INPUT REFERENCE AND SHIELD DRIVES

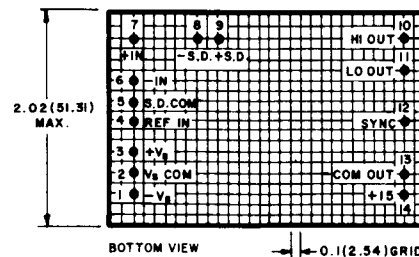
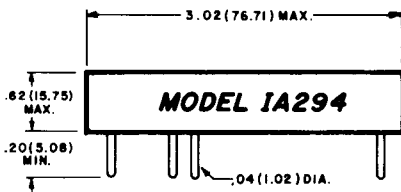
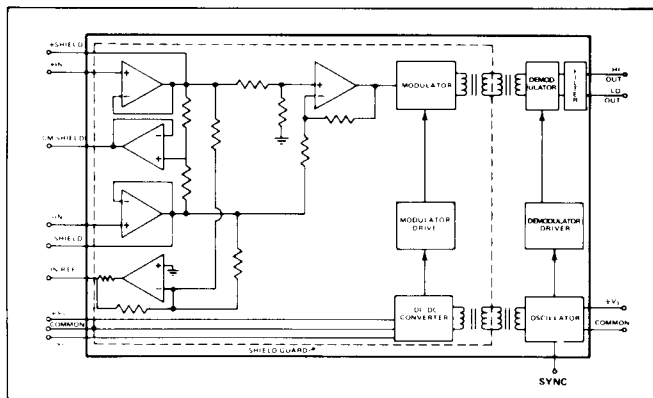


FEATURES

- UL component recognized
- True instrumentation front-end
- Active input reference
- Active shield drives
- Low noise: $8 \mu\text{V}$ P-P, .05 to 100 Hz.
- High CMRR: 126 dB input to output, 120 dB input to guard
- Isolated Power: $\pm 15\text{V}$ @ 15 mA
- Small size: 2" x 3"
- External Sync capability for multi-channel monitors

The Model IA294 Isolation Amplifier features small size, low noise, high common mode rejection, active guard and shield drives. CMRR is 126 dB input to output with balanced source impedance. CMRR from input to active input reference is 120 dB. This Isolation Amplifier contains most of the front-end circuitry that is found in monitor and diagnostic ECG's. The IA294 has a true instrumentation front-end for high CMRR, active right leg drive, sync capability for multichannel use, isolated power ($\pm 15\text{V}$ @ 15 mA) and separate active drives for either, individual shielded inputs or a common outer shield. This model also features 6500 V input to output protection and 6500 V differential input protection for defibrillators. Input to output leakage current is less than $10 \mu\text{A}$.

BLOCK DIAGRAM (IA294)



CHARACTERISTICS

(Typical @ 25 °C, $V_S = +15\text{VDC}$ unless otherwise noted.)

GAIN (NON-INVERTING)	10 V/V
ACCURACY	$\pm 2\%$
vs. Temperature	$\pm .01\%/^{\circ}\text{C}$
Non-Linearity	$\pm 0.1\%$
Differential Input Impedance	$3 \times 10^9 \Omega \parallel 3\text{pF}$
Common-Mode Input Impedance	$5 \times 10^9 \Omega \parallel 20\text{pF}$
INPUT VOLTAGE	$\pm 1\text{V}$ min.
Max. Safe Differential Input	$\pm 240\text{V}$ rms
Pulse, 10 ms Duration	$\pm 6500\text{V}$ peak
Max. Safe Common Mode Input (DC cont.)	$\pm 5000\text{VDC}$
INPUT BIAS CURRENT	$\pm 2\text{nA}$
vs. Temperature	$\pm .02\text{nA}/^{\circ}\text{C}$
SAFETY CURRENT LIMITS	10 μA max.
INPUT NOISE (5 K UNBALANCE)	
Voltage .05 to 100 Hz, pp	8 μV
Voltage 10 Hz to 1 kHz, rms	5 μV
Current .05 Hz to 1 kHz, rms	10 pA
COMMON MODE REJECTION	
Input to Output, CMV = 115 VAC, 60 Hz	
Balanced Source Impedance	126 dB
5k Ω Source Imbalance	120 db
Two Inputs to Input Reference	
CMV = 10V p-p, 60 Hz	
5k Ω Source Imbalance	120 dB
OUTPUT	
Range (50k Ω Load)	$\pm 10\text{V}$
Output Impedance	1 k Ω
Max. CMV, Outputs to power common	$\pm 30\text{V}$ peak
Offset voltage referred to input	$\pm 5\text{mV}$
vs. Temperature (0° to 70°C)	$\pm 100\mu\text{V}/^{\circ}\text{C}$
vs. Supply Voltage	$\pm 20\mu\text{V}/\%$
FREQUENCY RESPONSE	
Small Signal, -3 dB	1 kHz
Full Power, 6 V pp	500 Hz
Overload Recovery	20 msec
ISOLATED POWER OUTPUT	
Voltage, $\pm 10\text{mA}$ load	$\pm 15\text{VDC}$
Accuracy	$\pm 5\%$
Current, min.	$\pm 15\text{mA}$
NOMINAL WEIGHT	8 ounces
POWER SUPPLY, SINGLE POLARITY	
Voltage Rated Performance	± 14.5 to $+16\text{VDC}$
Current, Quiescent	$+40\text{mA}$
TEMPERATURE RANGE	
Rated Performance	0°C to 70°C
Storage	-25°C to +85°C
SOCKET	S135

IA296 ULTRA LOW NOISE TRUE INSTRUMENTATION MEDICAL ISOLATION AMPLIFIER

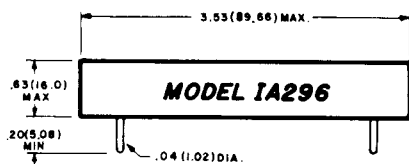
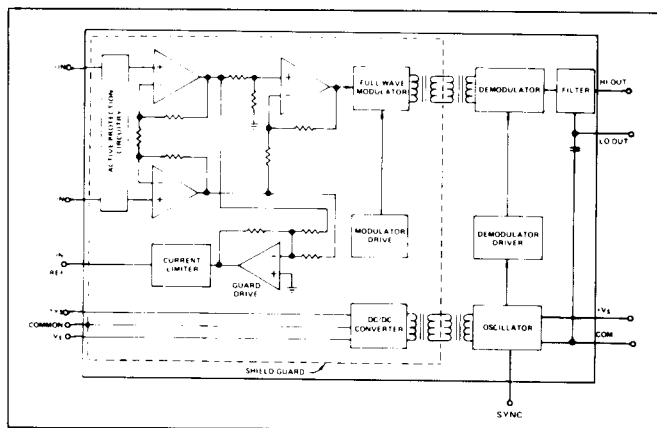


FEATURES

- UL Component Recognized
- Ultra Low Noise
- Failure of any internal component results in $< 10 \mu\text{A}$ bias current
- Excellent CMRR: 170 dB; 160 dB with 5 k Ω source imbalance
- External Sync Capability

The Model IA296 Isolation Amplifier features very high input/output isolation and very low noise. It can operate at common mode input voltages up to 5000 VDC continuous; CMRR is 170 dB with balanced source impedance, and 160 dB with 5 k Ω source imbalance. Input voltage noise is held to 0.3 μV , 10 Hz-1 kHz rms, and current noise to 4 pA, 0.5 Hz-1 kHz rms. Input bias current is only 200 pA, and on the failure of any component is limited to 10 μA . An independent ± 12 VDC, 10 mA supply in the input section with the same voltage isolation as the amplifier input, is used to power optional external circuitry.

BLOCK DIAGRAM IA296



CHARACTERISTICS

(Typical @ 25 °C, $V_S = +15$ VDC unless otherwise noted.)

GAIN (NON-INVERTING)	10 V/V
ACCURACY	$\pm 2\%$
vs. Temperature	$\pm 0.015\%/^{\circ}\text{C}$
Non-Linearity	$\pm 0.1\%$
Differential Input Impedance	$3 \times 10^5 \Omega \parallel 2.2 \text{ nF}$
Common-Mode Input Impedance	$10^7 \Omega \parallel 10 \text{ pF}$
INPUT VOLTAGE	± 0.5 V min.
Max. Safe Differential Input	± 30 V rms
Pulse, 10 ms Duration	± 500 V peak
Max. Safe Common Mode Input (DC cont.)	± 5000 VDC
INPUT BIAS CURRENT	± 200 pA
vs. Temperature	± 5 pA/ $^{\circ}\text{C}$
SAFETY CURRENT LIMITS	10 μA max.
INPUT NOISE (5 K unbalance)	
Voltage .05 to 100 Hz, pp	1.5 μV
Voltage 10 Hz to 1 kHz, rms	0.3 μV
Current .05 Hz to 1 kHz, rms	4 pA
COMMON MODE REJECTION	
Input to Output, CMV = 115 VAC, 60 Hz	
Balanced Source Impedance	170 dB
5k Ω Source Imbalance	160 dB
Input to Reference, CMV = 10V p-p, 60 Hz	
5 k Ω Source Imbalance	120 dB
OUTPUT	
Range (50k Ω Load)	± 5 V
Output Impedance	1 k Ω
Max. CMV, Outputs to power common	± 30 V peak
Offset voltage referred to input	± 5 mV
vs. Temperature (0° to 70°C)	$\pm 100 \mu\text{V}/^{\circ}\text{C}$
vs. Supply Voltage	$\pm 20 \mu\text{V}/\%$
FREQUENCY RESPONSE*	
Small Signal, -3 dB,	1 kHz
Full Power, 6 V pp	500 Hz
Overload Recovery	20 msec
ISOLATED POWER OUTPUT	
Voltage, ± 10 mA load	± 12 VDC
Accuracy	$\pm 10\%$
Current	± 10 mA
POWER SUPPLY, SINGLE POLARITY	
Voltage Rated Performance	± 14.5 to $+16$ VDC
Current, Quiescent	$+40$ mA
TEMPERATURE RANGE	
Rated Performance	0°C to 70°C
Storage	-25°C to +85°C
NOMINAL WEIGHT	8 ounces
SOCKET	S132

*For 10kHz bandwidth specify P/N IA297 when consulting factory.

