

# Genrad 2287

## Base System

640 fully bi-directional test points  
Synchronized Analog and Digital Subsystems  
All pins have parallel drive and sense capability  
Computer: Pentium PC  
Monitor adjustable height platform  
Ethernet Networking Interface (10baseT/Thinwire)  
Automatic Vacuum Control for single and dual well fixtures.  
System footprint: 64 x43.5 in (162.5 x 110.5 cm)



## Digital hardware

Common Drive Characteristics  
Range: Dual programmable drive levels from +10V to -6V  
Automatic drive verification at each pin. Four voltages selectable for each pin  
Output Current (with automatic compensation circuitry)  
>500 mA; burst duration typically 60ms  
>40 mA; steady state  
Current is automatically reduced from the burst value to steady state value in a transition time which is a function of the output current  
Typical Output Impedance: <2.0 ohm  
Software programmable Pull-up/Pull-down loads  
Drive memory: 16K  
Common Sensor Characteristics  
Dual programmable Sense thresholds from +10V to -6V. Sense thresholds independent of programmed drive level.  
Input impedance = 100kohm  
Bit by bit compare and CRC capture modes  
Sensor memory: 16K  
Clock Generation/Synchronization Characteristics  
Clock Generation frequency programmable up to 20 Mhz  
Clock Synchronization frequency programmable up to 20 Mhz

## Analog Hardware

Measurement Matrix - 8 lines by n pins  
2 sources, configurable as current or voltage  
DC Voltage Source: Programmable, 16-bit, 0 +/- 18V over 4 ranges, to +/- 500mA, programmable current limiting  
DC Current Source: programmable, 16-bit, 0 to +/- 500mA over 8 ranges, to +/- 18v programmable voltage limiting  
DC Voltmeter: 0 to +/- 200V over 9 ranges  
DC Ammeter: 0 to +/- 160mA over 7 ranges  
Reactance Module:  
Programmable frequency from .15Hz to 100kHz

Programmable AC level to 7 Vrms, 12-bit  
Programmable DC offset, 16-bit  
Arbitrary Waveform Generator  
True RMS-DC Detection  
Differential Detector/DVM/Digitizer  
Coherent Transfer Function Measurement  
Component Measurement Capability  
Resistive (R) Range: 0.1 to 30 Mohm  
Capacitive (C) Range: 1 pF to 10,00 uF  
Inductive (L) Range: 10 uH to 1000 H  
External Instrument Matrix: 9 BNC's to 8 line to internal instruments or n pins  
Traceable Calibration Daughterboard

## Hardware Options

Test points expandable to 3840  
Each GR2287i pinboard provides 32 drive/sensors and 32 scanners, each multiplexed to 128 hybrid test points  
Power tilt and Automation-Ready Configurations  
Deep Serial memory instrument  
Analog Functional Test module  
Flexible Power Supply Package  
Fixed power Supplies: +5V@6A, +/-15V@1A or +5V@6A, +/-12V@1.3A  
High Voltage Source, configurable as current or voltage, programmable voltage limit, +/-120V, +/- 50mA  
IEEE-488 Interface Controller  
Ethernet Networking Interface(Thinkwire/AUI)



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