

# System 1828

## CMOS/CCD Production Test System

*Reduce Your Production Test Cost!*

**The System 1828 Production Test System is designed to simplify your testing applications.**

- **High Throughput at low cost**
- **Simple reconfiguration for new DUT**
- **Graphical environment for rapid test plan generation**
- **Windows NT system software**
- **Easily expandable for new requirements**



### Description

The basic system consists of a 150 MHz data generator, 10 clock drivers, 6 DC biases, one channel of 10 MHz 12 bit analog data acquisition and one channel of digital acquisition. Additional options can be added to customize the system to meet your requirements. The system software controls all of the internal instrumentation and interfaces directly with external controllers and device handlers providing an easy environment to create test programs and control test procedures. Each analog data acquisition card is complete with Global Offset Correction, Amplification, Filtering, Correlated Double Sampling, A/D Converter, and 16 Megabytes of RAM per channel. The digital acquisition card can be configured to handle serial or parallel data up to 16 bits wide. The system can be expanded with additional acquisition cards, clock drivers and bias supplies. Reconfiguring the System 1828 for the next device to be tested

The system software, PI-DATS version 2.x, was written for users of all Pulse Instruments Test Systems. This software implements a programming structure that uses visual objects to replace programming language. This graphical software environment provides a simple method to rapidly generate device test plans. PI-DATS uses a password security system that protects device test plans from unauthorized modification. PI-DATS allows the test engineer to define test conditions prior to test execution using a Test Plan Edit Screen. The operator can enter or modify information in a Test Plan pertinent to the device being tested. An entire test sequence can be stored in a single file including interfacing with a parts handler. PI-DATS software has been in daily use for the test of CMOS, CCD and IR Imagers for over four years. During this period there has been a full time effort to expand the functionality, and to

**requires a minimal amount of time. Typically the reconfiguration consists of changing the DUT interface card and selecting the appropriate test plan.**

**enhance the capabilities based upon user feedback and changing industry requirements. The software is PC based and can take advantage of many communication ports such as serial, parallel and ethernet.**

# System 1828 Features

## Basic Hardware Complement

<b>Data Generator</b>
16 Channels Timing Generation
<b>Low Noise DC Bias and Clock Driver System</b>
10 Channels Low Noise Clock Drivers
6 Channels Low Noise DC Biases
<b>Acquisition Mainframe VME to PC</b>
One Channel 10 MHz 12 Bits A/D, 16 MB RAM
One Channel Serial/Parallel Digital , 16 MB RAM
<b>IBM Compatible Computer to Current Standards</b>
<b>Complete PI-DATS Software Package</b>

## PI-DATS Software

Partial List of included functional modules

<b>Hardware Manager</b> - Configures the hardware	<b>Visible Illuminator</b> - Set Up and Control
<b>Clock Driver and Bias Control</b> - Set up and Control	<b>Spot Scanner</b> - Set Up and Control
<b>Data Generator Controller</b> - Set Up and Control Timing	<b>Black Body Controller</b> - Set Up and Control
<b>Result</b> - Data Display	<b>Interconnect and Monitoring</b>
<b>Software Functions</b> - Analysis	<b>Generic GPIB</b> - Enter Ascii text to talk to any GPIB instrument
<b>Digital Voltmeter</b> - Set up and Control	<b>Property Page Builder</b> - Allows you to build your own virtual instruments or control any GPIB instrument
<b>Oscilloscope</b> - Set up and Control	<b>Dewar</b> - Set Up and Control
<b>Function Generator</b> - Set Up and Control	<b>Security</b> - Select levels of access to software functions
<b>Data Acquisition</b> - Set Up and Control	