

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

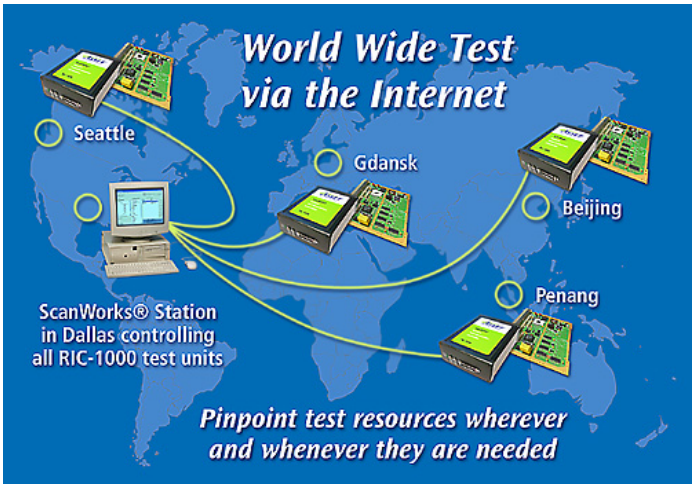
ASSET INTERTECH

REMOTE INSTRUMENTATION CONTROLLER

RIC-1000 PRODUCT OVERVIEW

The RIC-1000 is a member of ASSET's Remote Instrumentation Controller family of controllers. Remote Instrumentation Controllers provide an extremely flexible interface for remote communication between your ScanWorks® stations and your unit under test (UUT). Remote Instrumentation Controllers support an auto-sensing 10/100/1000 CAT5E/6 Ethernet connection as the communication link between ScanWorks software and the hardware that connects directly to your UUT. The Ethernet and TCP/IP protocol enable you to connect ScanWorks® on your local PC to any UUT connected to an RIC-1000 that is accessible on a common network. With the proper network connections and permissions, you can sit at your desk and control operations on a UUT anyplace in the world. Any limitations on the accessibility are entirely under the control of your network administrators.





RIC-1000 Features

The RIC-1000 supports a single boundary scan test port with eight non-boundary scan Discrete IO signals, a maximum TCK frequency of 50 MHz, and UUT logic levels from 1.2V to 3.3V. It supports most ScanWorks actions with a few limitations because of the nature of the embedded technology used. See the Limitations section below.

The RIC-1000 product includes:

- One controller module
- One RIC-1000 UUT cable (2 feet)
- One CAT5E Ethernet cable (2 meters)
- One Power Supply, AC-DC 5V 4A

Programmable TCK

The TCK signal provided by the Remote Instrumentation Controller is selectable in 36 increments from 160 KHz to 50 MHz. This allows you to select the maximum TCK frequency your board will support, enabling the fastest test and programming times. The TCK frequency is controllable from the ScanWorks hardware configuration menu or by setting ScanWorks Design Requirement parameters.

The RIC-1000 supports devices that cannot enter the PAUSE-DR Test Access Port (TAP) state during a shift operation.

Discrete IO Signals

The RIC-1000 controller supports eight non-boundary-scan signals that can control inputs to the UUT or observe outputs from the UUT. The state of these signals can be controlled and observed using the ScanWorks DIO action. These signals are all bi-directional and support the same UUT voltages as the TAP signals. Direction and voltages settings are controlled for pairs of signals. The RIC-1000 documentation and Electrical Specifications provide additional details.

DIO0 can be used as a Write Enable (WE) signal and DIO1 can be used to monitor the Ready/BUSY signals used to improve flash programming times. The UUT cable provided with the RIC-1000 supports four DIO signals. A custom cable is required for access to the other four signals.

UUT Voltages

The RIC-1000 supports UUT interface voltages of 1.2V, 1.5V, 1.8V, 2.5V, and 3.3V for both the TAP signals and DIO signals. The TAP and DIO signal voltage levels are software controlled and set in the ScanWorks Hardware configuration dialog.

IP Address Assignment

The RIC-1000 has a permanent MAC address assigned in the factory. IP addresses are assigned by the user, based on information from your network administrators. The initial IP address assignment is done with a USB flash memory stick that has a special IP address text file with the IP address. The RIC-1000 automatically reads the text file and assigns the IP address. You can use one USB memory stick and one text file to assign IP addresses for several RIC-1000s. Once an IP address has been assigned, it can be changed via the Ethernet connection using a telnet session. More information is available in the RIC-1000 documentation.

Cables

A two foot cable is provided with the RIC-1000 to connect the RIC-1000 to the UUT. The cable is terminated on the UUT end with the ASSET standard 20-pin UUT connector. A two meter CAT5E Ethernet cable which supports a 10/100/1000 CAT5E/6 Ethernet connection is also provided. More information about the cable is provided in the RIC-1000 documentation and Electrical Specifications provided with the product.

©2008 ASSET InterTech, Inc.

Power Supply

A 5V, 4A power supply that uses 100-240VAC at 47-63 Hz is provided with the RIC-1000.

Physical Features

The RIC-1000 is built to commercial environmental standards for the U.S. and Europe. It is in a rugged enclosure to protect it from EMI damage and demanding environments.

ScanWorks Support

The RIC-1000 uses ScanWorks Embedded Instrumentation Engine (EIE) technology. EIE technology distributes the intelligence required to apply JTAG tests from the host PC into the Remote Instrument Controller. The software "engine" that applies the scan operations runs on a CPU in the Remote Instrument Controller hardware and executes tests based on UUT specific test data that is downloaded to on-board memory in the Remote Instrument Controller. The test data files loaded into Remote Instrument Controller memory are automatically created by ScanWorks (Version 3.10 or later) when actions are built and are automatically downloaded to the Remote Instrument Controller the first time the action is run. ScanWorks controls when the actions are applied. Test results are returned to ScanWorks for full pin-level diagnostics.

The remote access features and benefits of the RIC-1000 are available in ScanWorks Boundary Scan Stations purchased after July 1, 2008.

Limitations

Some current ScanWorks actions/features are not yet supported on the RIC-1000. These are:

- 1532 Adaptive Action (future release planned)
- 1532 ISC (Lattice-based)
- NAND Flash Action (future release planned)
- mDOC H3 Action
- ASP (future release planned)
- CPU (future release planned)
- IBIST (future release planned)
- SPI Write to File feature
- I2C Write to File feature
- Flash Programming Write to file feature
- STAPL Byte code application



©2008 ASSET InterTech, Inc.

ASSET
Driving Embedded Instrumentation

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP