

# REAL WORLD CERTIFIER™

PERFORMANCE CERTIFY AND TROUBLESHOOT LAN  
HARDWARE AND CABLING (10MB, 100MB, GIGABIT)

TAKES YOU FAR BEYOND TYPICAL LAN AND CABLE  
TESTING.... NOW, IN ADDITION TO ALL THE FAMILIAR  
CABLE TESTS, YOU CAN PERFORM REAL *SPEED*  
*TESTS* ON CABLES, SWITCHES, HUBS AND PCS... WITH  
RESULTS DISPLAYED ON EASY-TO-READ GRAPHS!

- IDEAL FOR BOTH LAN MANAGERS AND CABLE INSTALLERS
- REAL WORLD CERTIFY NETWORK CABLES FOR 10MB, 100M, OR GIGABIT CAPABILITY
- TEST EXISTING CABLES FOR HIGHER SPEED COMPATIBILITY
- SPOT FAULTY WIRING CLOSET JUMPERS FROM YOUR OFFICE WALL OUTLET
- IDENTIFY EXCESSIVELY NOISY CABLES AND WORN CONNECTORS
- DECODE 10/100/GIG PCs, SWITCHES AND HUBS FOR ADVERTISED CAPABILITY
- GO "INLINE" BETWEEN TWO LAN DEVICES AND IDENTIFY THE NEGOTIATED SPEED
- TEST 10/100/GIGABIT PCs, SWITCHES AND HUBS FOR DATA SIGNAL LEVELS
- PERFORM YOUR OWN INSPECTION ON NEWLY PURCHASED DEVICES AND CABLES
- IDENTIFY SLOW RUNNING LINKS



MODEL RWC1000K

**ByteBrothers™**  
Network Test and Certification  
20th Anniversary — bytebrothers.com

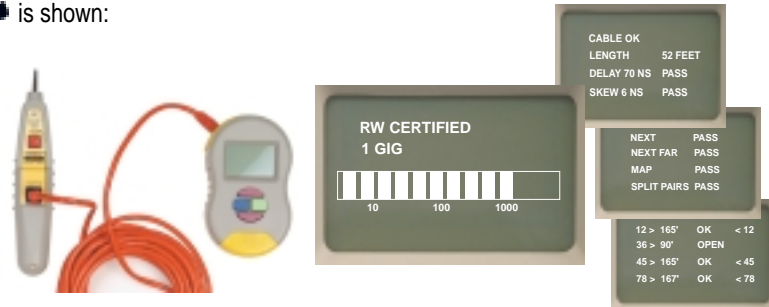
# WHEN YOU ARE TROUBLESHOOTING OR DOCUMENTING YOU WANT EASY-TO-UNDERSTAND RESULTS..... QUICKLY.....

## CABLE TESTS

THE SIMPLE STEPS THAT SPOT SLOW CABLES, BAD CONNECTORS, INCORRECT WIRING, NOISY CABLES, IMPROPER LENGTHS AND LOW SIGNAL LEVELS FROM HUBS, SWITCHES AND PCs.

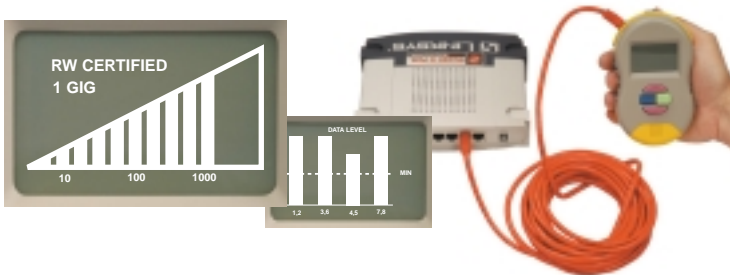
### REAL WORLD CERTIFYING CABLES (LEVEL 1)

- 1 Follow the on-screen instructions. You will perform sophisticated tests of your cable's health (see far panel for list). The RWC1000 displays the results in a clear, concise format that you can record on the documentation tablet. The concluding Level 1 graph (*Projected cable speed*) is shown:



### RW CERTIFYING CABLES WITH HUBS, SWITCHES AND PCs (LEVEL 2)

- 1 After completing Level 1 (above), connect any hub/switch/PC (Gig preferred\*). Additional tests (see far panel) are performed with real data. The concluding Level 2 graphs (*Confirmed cable speed*) are shown:

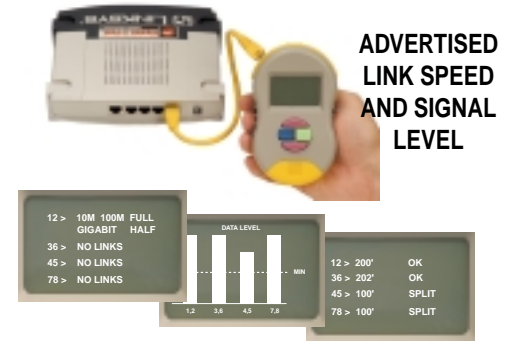


## NETWORK TESTS

DECODE A HUB, SWITCH AND PC'S CAPABILITIES AND SIGNAL LEVEL. GO "INLINE" BETWEEN TWO DEVICES FOR THE "NEGOTIATED" SPEED.

### PORT CAPABILITY AND SIGNAL LEVEL

Connect the RWC1000 to any hub, switch or PC. The port's capabilities and level are displayed.



### "INLINE" PORT CAPABILITY

Connect the RWC1000 between any pair of PCs, hubs and switches. The "negotiated" speed of the link is displayed.

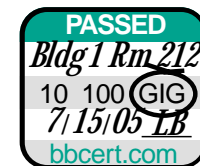


\* The Level 2 test uses real data from your hub, switch or PC. Or buy our lowcost Linksys® GIGABIT switch (see web offer). The Linksys switch will drive 5 cables at a time.

## A CUSTOM TABLET DOCUMENTS YOUR RESULTS. PASSED STICKERS IDENTIFY EACH OUTLET'S CAPABILITIES.



Record your test results on the enclosed tablet. Affix the enclosed "PASSED" labels to the cables and devices that have been tested.



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# COMPARISONS AND DETAILS.....

FEATURE	BYTE BROTHERS RWC1000K	MAJOR BRAND CERTIFIER
Wire map	Yes	Yes
Opens, shorts, splits	Yes	Yes
Distance to splits	Yes	No
Propogation delay	nanosec	nanosec
Skew	nanosec	nanosec
NEXT	Pass/Fail	dB
NEXT (FAR)	Pass/Fail	dB
Tests speed (Level 1)	10 MB, 100 MB, GIG	NA
Tests speed (Level 2)	10 MB, 100 MB, GIG*	Cat 5, 5e, 6
Attenuation	Graph (%)*	dB
LAN port scanning	Yes	Yes
Inline port scanning	Yes	No
Price (MSRP)	\$595.00	\$4000.00

\* Uses real data from your hub, switch or PC. Or buy our lowcost Linksys® GIGABIT switch (see web offer)

## CABLE TESTS

Real World Certification proves that it doesn't take \$4000 to properly ring out a cable installation!

### Real World Certification Level 1

Speed tests with nanosecond accuracy will Real World certify your cables for use in 10MB, 100MB and Gigabit networks.



#### LEVEL 1 TESTS

- ✓ Length measurement of each cable pair.
- ✓ Locates opens, shorts and distance to the fault.
- ✓ Locates split pairs and the distance to the split.
- ✓ Wire map. Graphs cables internal pairing.
- ✓ NEXT (near end crosstalk) and NEXT(FAR).
- ✓ Propogation delay (time to transit cable).
- ✓ Skew (time delay between pairs).
- ✓ Speed Projection (Level 1): Algorithm converts test results into an easy-to-read graph projecting the cable's speed capability (up to 1 GIGABIT).

### Real World Certification Level 2



Connecting to a hub, switch or PC gives the RWC1000 the real data and signal levels necessary to confirm a cable's capabilities.

#### LEVEL 2 TESTS. Includes Level 1 tests plus:

- ✓ Attenuation. Graphs level of real live data.
- ✓ Hot Splits. Split pairs and remote split pairs detected on a dead or live cable connected to a PC, hub or switch.
- ✓ Speed Certification (Level 2). Enhanced speed display samples *real live data* on all active pairs up to the limit of the hub, switch or PC (up to 1 Gig).

**Note:** The Level 2 test uses real data from your hub, switch or PC. Or buy our lowcost Linksys® GIGABIT switch (see web offer). The Linksys hub will drive 5 cables at a time.

### Toner/probe

- ✓ Toner/probe. Includes a full featured toner/probe. Tones all 4 pairs individually to locate wires in crowded wiring closets. Non-conductive tip and volume control.



## NETWORK TESTS

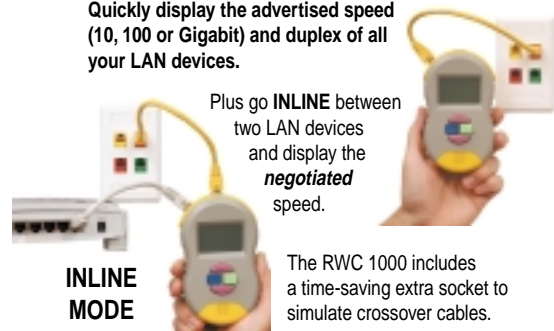
Real World Certification and LAN data testing makes the RWC ideal for IT managers!

**IT managers** protect the health of *both* the cabling and network devices. If a problem exists and the cabling passes testing (opposite panel), the RWC has **NETWORK** tests to isolate the problem:

- ✓ **Single Sided and INLINE port tests** quickly check the ability of the hub, switch or PC to communicate.
- ✓ **The Real World Certification Level II tests** (see opposite panel) can exercise suspect hub, switch or PCs using *real data* from the devices themselves.
- ✓ **Manual includes instructions for using Ping and other software** that come with Windows® and Linux® PCs. Use to test links and devices on the network.

### Single and INLINE port tests

Quickly display the advertised speed (10, 100 or Gigabit) and duplex of all your LAN devices.



Plus go **INLINE** between two LAN devices and display the *negotiated* speed.

**INLINE  
MODE**

The RWC 1000 includes a time-saving extra socket to simulate crossover cables.

### Hot splits

While the RWC1000 is identifying the data from your hub, switch or PC it is also "shooting the cable", checking for opens, shorts and split pairs. Now you can do single sided tests without powering down devices or unplugging cables in crowded wiring closets.

### Port Beacon

Perfect for locating a port, the Real World Certifier sends out a "beacon" illuminating the LINK light on a hub, switch or PC.

### Using Windows® or Linux® for Pinging

Instructions for using built-in commands on your PC to test the software layer of the network are in the manual: **PING**: Check if a device is reachable. **IPCONFIG**: Dump configurations. **NET VIEW**: List names of network devices.

**RWC1000  
MODEL NUMBER  
INFORMATION**



**CONTENTS**

- RWC1000 Main Unit
  - RWC1000 Remote Unit
  - Cat5e Patch Cables (2)
  - Protective case (zippered)
  - Documentation tablet
  - "Passed" stickers (64)
  - 9V Battery (2)
  - Instructional DVD
  - Illustrated Users Manual
- Warranty:  
1 Year parts and labor.
- Made in U.S.A.  
Patent pending

**RWC1000K ..... \$595.00.**



**GIGABIT SWITCH  
WEB OFFER**

If you need a PC, switch or hub to drive Level 2 testing... here's the perfect source. The Cisco Linksys can drive all 4 pairs up to Gigabit (1000 MB) speeds.

**RWC-EG005 ..... \$125.00.**

**REAL WORL CERTIFIER SUPPLIES**

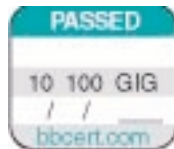


**DOCUMENTATION TABLET**

50 sheets, 4.5" x 8", Color  
Documents each cable/outlet tested.

**RWC1007..... \$5.95/ea**

**"PASSED" LABELS**



96 labels/packet, 7/8"W x 3/4"H ea. Color.  
Adhesive backed. Document each socket tested. Fill-in areas for location, data, technician initials and speed.

**RWC1011..... \$5.95/pkt**

[www.bytebrothers.com](http://www.bytebrothers.com)



**Network Test and Certification**

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