



TRACER 2631

LAN Extension

Product Features

- Wireless IP routing
- LAN/WAN bridging
- Integral bridge/router
- Independent T1 for voice or additional data
- Direct sequence spread spectrum
- License-free per FCC part 15.247
- 2.4 GHz or 5.8 GHz
- Rackmount or mastmount RFC option
- 1U, 19" rack space using mastmount RFC
- Industry-leading five-year warranty

TRACER® 2631 is a microwave radio that provides wireless IP bridge/routing for LAN-to-LAN extension and an additional T1 for voice and data. TRACER 2631 features an integral router with a 10BaseT interface for connecting directly to an Ethernet LAN and eliminates the requirement for an external router. With TRACER 2631, you can extend your LAN to remote locations previously unreachable.

The TRACER 2631 uses spread spectrum technology to effectively deliver data over distances up to 30 miles and can be coupled with any of the TRACER ISM (Industrial, Scientific, and Medical) band Radio Frequency Converters (RFCs). This allows the flexibility of system planning to cover 2.4 GHz and 5.8 GHz, as well as rackmounted or mast-mounted RFCs. All the convenient options of license-free spread spectrum, including quick deployment, security, reliability, and elimination of recurring costs are conveniently combined in TRACER 2631 to provide wireless routing and bridging for LANs.

TRACER 2631 provides, in a single microwave path, two independent 1.544 Mbps circuits. One is used for LAN-to-LAN IP bridging/routing and the second provides a DSX-1/DS-1 interface that can be used to provide voice services or additional data capacity.

For provisioning and servicing purposes, user access is available from the front panel of the TRACER 2631 unit and via VT100 emulation. Monitoring and control interfaces include status LEDs, configuration switches, loopbacks, self test, and major and minor alarms.

ADTRAN is an ISO 9001 manufacturer. TRACER 2631 is designed and manufactured to provide exceptional performance with the highest levels of reliability and durability. TRACER 2631 is backed by an industry-leading five-year warranty and ADTRAN's award-winning technical support.

LAN Extension



TRACER 2631 backview

Product Specifications

Routing and Bridging

- IP routing
- IPX routing
- IEEE 802.1D MAC bridging

Protocols

IP:

- TCP, RIP V1 and V2, UDP, ICMP, DHCP, ARP, UDP Relay, SYSLOG

IPX:

- IPX, RIP, SAP

PPP:

- LCP, IPCP, BCP, IPXCP

Network Address Translation

- DHCP for IP address assignment (10 users)

Frame Relay

- RFC 1490 Frame Relay encapsulation
- Up to 10 PVCs supported

Packet Filtering

- MAC header, pattern, IP, IPX

Security

- PAP, CHAP, EAP, Radius, password protection

LAN Interface

- Ethernet 10BaseT (RJ-45)
- IEEE 802.3 compliant
- NIC/HUB switch

T1 Interface

- **Digital Interface:** DS-1/DSX-1
- **Connection:** RJ-48C, Bantam
- **Monitor:** Bantam
- **Line Code:** AMI, B8ZS
- **Framing:** SF, ESF
- **Alarms:** YEL/AIS, Red, BPV
- **Loopbacks:** Local and remote

Configuration

- VT100 terminal interface
- **Remote:** Telnet or SNMP MIB-II, Enterprise MIB (router only – does not include T1 interface)

Diagnostics and Maintenance

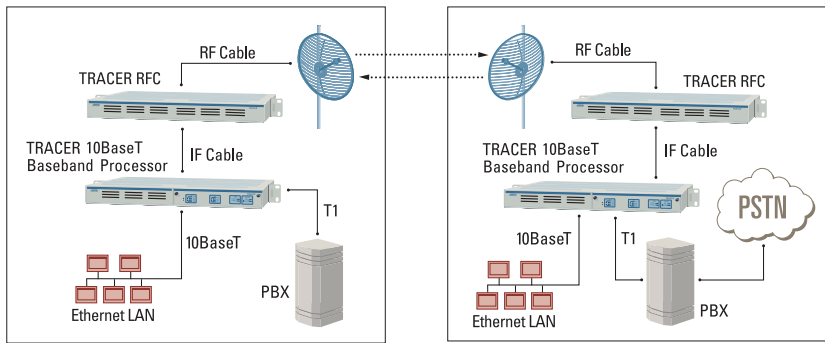
- Loopbacks
- Ping utility
- FLASH upgradable – Local and Remote (router only – does not include T1 interface)
- Telnet client and server (router only – does not include T1 interface)
- TFTP client and server (router only – does not include T1 interface)
- DHCP/Boot server, SNMP V1 MIB II, Enterprise MIB, Traps (router only – does not include T1 interface)
- Performance logs

User Interface

- **Front Panel:** Status LEDs, configuration switches
- **Diagnostics:** T1 loopback, remote test with BERT, self-test
- **Test Points:** RSSI, I & Q
- **Alarm Contacts:** Major, minor (normally open or closed)

Terminal Interface

- **Function:** Menu-driven user interface, monitor and control of local and remote end, password-protected, event history
- **Data Rate:** 9600 bps
- **Emulation:** VT100
- **Connection:** DB-25 (RS-232)



Transmitter

2.4 GHz

- **Output Power:** +20 dBm maximum
- **Frequency Band:** 2.4 to 2.4835 GHz
- **Channel Bandwidth:** 40 MHz
- **Intermediate Frequency:** 140 MHz

5.8 GHz

- **Output Power:** +20 dBm maximum
- **Frequency Band:** 5.725 to 5.850 GHz
- **Channel Bandwidth:** 40 MHz
- **Intermediate Frequency:** 140 MHz

Receiver

2.4 GHz

- **Receive Level Threshold:** -91 dBm (10-6 BER)
- **Receive Level Max:** -30 dBm
- **Frequency Range:** 2.4 to 2.4835 GHz
- **Channel Bandwidth:** 40 MHz
- **Intermediate Frequency:** 70 MHz

5.8 GHz

- **Receive Level Threshold:** -89 dBm (10-6 BER)
- **Receive Level Max:** -30 dBm
- **Frequency Range:** 5.725 to 5.850 GHz
- **Channel Bandwidth:** 40 MHz
- **Intermediate Frequency:** 70 MHz

Spread Spectrum Data Pump

- **Modulation:** QPSK
- **Spreading Method:** Direct sequence
- **Codes:** 10
- **Code Length:** 120
- **Processing Gain:** >12dB
- **Spreading Rate:** 12 times

Radio Frequency Converter

- **Preselector Filter:** Capacity-tuned
- **Antenna Port:** N-type, female
- **Impedance:** 50 Ω

Mechanical and Environmental Baseband Processor

- **Operating Temperature:** -25° to 65° C
- **Width:** 16.75" (for 19" EIA rackmounting)
- **Height:** 1.75" (1U)
- **Depth:** 9.5"
- **Humidity:** 95%, non-condensing
- **Weight:** 6 lbs.

Radio Frequency Converter Rackmount

- **Operating Temperature:** -40° to 65°C
- **Width:** 16.75" (for 19" EIA rackmounting)
- **Height:** 1.75" (1U)
- **Depth:** 9.5"
- **Humidity:** 95%, non-condensing
- **Weight:** 9 lbs.

Radio Frequency Converter Mastmount

- **Operating Temperature:** -40° to 65°C
- **Diameter:** 9"
- **Height:** 21"
- **Humidity:** 100%
- **Weight:** 18 lbs.

Ordering Information

Equipment	2.4 GHz Part #
Mastmount Plan A	4280TRC24RT1M1A
Mastmount Plan B	4280TRC24RT1M1B
Rackmount Plan A	4280TRC24RT1R1A
Rackmount Plan B	4280TRC24RT1R1B
Optional Power Supply	1360DSK24VL1

Equipment	5.8 GHz Part #
Mastmount Plan A	4280TRC58RT1M1A
Mastmount Plan B	4280TRC58RT1M1B
Rackmount Plan A	4280TRC58RT1R1A
Rackmount Plan B	4280TRC58RT1R1B
Optional Power Supply	1360DSK24VL1



CORPORATE OFFICE

ADTRAN, Inc.
901 Explorer Boulevard
P.O. Box 140000
Huntsville, AL 35814-4000

800 9ADTRAN

256 963-8000
fax: 256 963-8699
fax back: 256 963-8200
e-mail: info@adtran.com
web site:
www.adtran.com/wireless
www.adtranwireless.com

REGIONAL OFFICES

Chicago, IL 800 436-4217
Seattle, WA 800 390-1573
Washington, DC 800 794-9798

FIELD OFFICES

Atlanta, GA 800 289-0966
Chicago, IL 800 471-8655
Columbus, OH 888 865-2237
Dallas, TX 800 471-8648
Denver, CO 800 471-8651
Irvine, CA 800 788-5408
Kansas City, KS 800 471-8649
Los Angeles, CA 888 223-7668
Nashville, TN 888 223-7657
New York, NY 800 471-8657
Richmond, VA 800 689-9915
San Jose, CA 888 223-7655

INTERNATIONAL CONTACTS

Beijing, China
8610 8529-8895

Canada
1 877 923-8726

Hong Kong
52 2824-8283

Latin America
954 474-4424

London, U.K.
44 1252 626-730

Melbourne, Australia
61 3 9225-5114

Mexico/Caribbean
954 577-0357

Zürich, Switzerland
41 1 880-2777



I.S. EN ISO 9001

ADTRAN is a
ISO 9001 registered company.



TL 9000

ADTRAN is a
TL 9000 registered company.

Printed in the U.S.A.
64280TRC*RT1*1*8D November 2001
©2001 ADTRAN, Inc. All rights reserved.

Specifications subject to change without notice. ADTRAN and TRACER are registered trademarks of ADTRAN, Inc. All other registered trademarks and trademarks mentioned in this publication are the property of their respective owners.