



# **RAD**GROUP

World Leaders in Voice and  
Data Communications Technologies





# RADGROUP

World Leaders in Voice and  
Data Communications Technologies

A unique business philosophy distinguishes the RAD Group, which has no holding company, but is strategically guided by its founders. Each RAD Group company operates autonomously under a common strategic umbrella. This decentralized approach maximizes the advantages inherent in smaller business units, such as flexibility, entrepreneurial spirit and management focus. A new company is established when a market opportunity is identified and requires a technology, marketing approach or corporate culture that does not exist in any of the other companies.

Simultaneously, cooperation among the independent business entities is encouraged and involves sharing technology, market channels and market information. Start-up companies initially receive administrative and marketing assistance from the RAD Group. This lowers operating costs at the crucial early stages of operation. Employees of these start-ups, who often share in the profits and the critical decision-making process, are thereby highly motivated to ensure the success of the enterprise.

## Contents

RAD Data Communications	4
Silicom	6
RADCOM	7
RADVISION	8
Ceragon Networks	9
Radware	10
RADWIN	11
PacketLight	12
Wisair	13
Channelot	14
Bynet Group	15

## **RAD Data Communications**

Established in 1981 | Privately Held  
[www.rad.com](http://www.rad.com)



**data communications**

**The Access Company**

**Innovative access solutions for carriers, service providers and enterprise networks**

For nearly 30 years, privately held RAD Data Communications has been providing innovative voice and data access solutions for mobile and fixed line carriers, service providers and enterprises around the world. Driven by technological innovation, guided by a veteran management team and imbued with a corporate philosophy that values long-term cooperation with its customers and partners, RAD is preparing users to meet future telecommunications and data delivery challenges while enabling them to deal quickly and effectively with their immediate access requirements.

RAD is a preferred solutions provider for more than 100 operators around the world, serving customers from Tier 1 mobile operators and fixed line incumbents to city carriers, ISPs and rural service telcos. Beyond its strong ties with telecom providers, RAD maintains extensive relationships with end users in the banking, commerce, education, finance, government, industry, defense, transportation, and utility sectors.

RAD Data Communications is uniquely qualified to accompany service providers and their customers through the migration to next-generation networks. Since its establishment, RAD has embraced a multidisciplinary approach to R&D, mastering in-house a broad range of protocols, technologies and transmission media.

The result is a product portfolio that allows users to preserve their investment in existing access infrastructure and equipment while leveraging lower-cost-per-bit next-generation networks for new services with the end-to-end Quality of Service (QoS) so vital for today's packet-based applications.



RAD's extensive product line includes:

- Cellular Backhaul and Optimization
- Ethernet Access Devices (EADs)
- Pseudowire Access (TDM and ATM over IP/MPLS/Ethernet)
- Compressed Voice System (CVS) and Voice/Data Integration
- IP Telephony and VoIP
- Integrated Access Devices (IADs)
- Next-Generation Multiservice Access Platform (MAP)
- Last Mile Access, xDSL, Fiber, Baseband Modems, and Wireless
- ATM Access Devices
- Network Management
- Internet/Intranet and X.25/Frame Relay Connectivity Solutions
- Rate and Interface Converters

### Quality Matters

RAD prides itself on producing quality products and offering excellent service that meet customers' needs, while at the same time protecting our environment. The company is certified ISO 9001 for its R&D and manufacturing while its environmental management system has been certified ISO 14001. The company is also committed to the European Union's ROHS and WEEE directives.

### Partners, Training and Support

Customer sales, training and support are handled by a service and sales structure of highly professional certified partners, authorized distributors and system integrators located in more than 160 countries. They are backed by RAD offices in Argentina, Australia, Brazil, Canada, China, France, Germany, India, Israel, Japan, Russia, the United Kingdom, and the United States, as well as a central support staff at the company's headquarters.



Carrier Ethernet Access



Cellular Backhaul



Voice Optimization and VoIP



Utilities and Transportation



Multiservice Access



Government and Enterprise



**Silicom**

Established in 1987 | Traded on the NASDAQ Stock Market since 1994 and on TASE since 2005 (SILC)  
[www.silicom.co.il](http://www.silicom.co.il)

**Silicom** Ltd.  
 Connectivity Solutions



PE10G2BPi -LR: Dual Port Fiber (LR) 10 Gigabit Ethernet PCI Express Bypass Server Adapter Intel® Based



PE10G2DBI-SR: Dual port Fiber (SR) 10 Gigabit Ethernet PCI Express Content Director Server Adapter Intel® Based

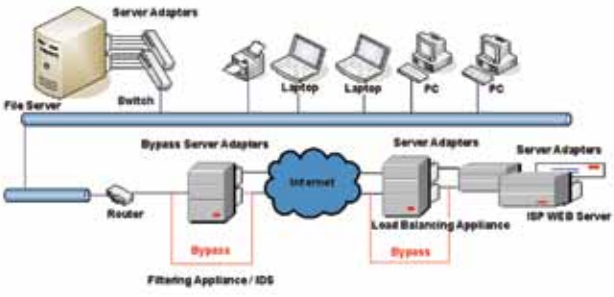
**High-end adapters for servers and security appliances**

Silicom is an industry-leading provider of high-performance server/appliance networking solutions.

The company’s flagship products include a variety of multi-port Gigabit Ethernet, copper and fiber optic server adapters and innovative bypass adapters designed to increase throughput and availability of server-based systems, WAN optimization and security appliances, and other mission-critical gateway applications.

Silicom’s adapters provide the special networking functionality needed by appliances – hardware products with specific applications that easily plug into a network with minimal setup. Silicom has 20 years of experience in the design, manufacture, sale, and support of connectivity solutions.

Silicom’s products improve the throughput and reliability of server-based systems and provide special networking features such as CPU utilization offload and bypass. All products are ROHS compliant and are based on two different industry-leading chipsets, thus assuring compatibility for all customers. Among Silicom customers are leading vendors and suppliers of security appliances, load balancing appliances, WAN acceleration systems, video-on-demand/content delivery systems, telecom equipment, and high-end computing applications.



If filtering appliance/IDS fails to operate with bypass adapters, the user will still be able to connect to the Internet.

# RADCOM

Established in 1991 | Traded on the NASDAQ Stock Market since 1996 and on TASE since 2006 (RDCM)  
www.radcom.com



RADCOM provides innovative network test and service monitoring solutions for communications service providers and equipment vendors.

RADCOM specializes in solutions for next-generation networks, both wireless and wireline. Its comprehensive, carrier-strength solutions are used both to expedite the development and installation of network equipment and to maintain operational networks.

RADCOM's products facilitate fault management, network service performance analysis, troubleshooting, and pre-mediation. RADCOM's products are essential for the successful rollout of next-generation (2.5G, 3G and 3.5G) cellular networks, IMS, Voice over IP, and IPTV technologies. RADCOM's leading solutions for troubleshooting connectivity problems and network analysis allow equipment vendors and service providers to ensure a trouble-free network environment and a high-quality user experience.

RADCOM markets the award-winning Omni-Q, a unique, next-generation network testing, monitoring and performance management solution. It consists of a central management module together with a range of intrusive and non-intrusive probes for VoIP, UMTS, CDMA, IPTV, IMS data, and other networks and services. Omni-Q enables service providers to deliver reliable, high-quality packet telephony services while optimizing network resources.

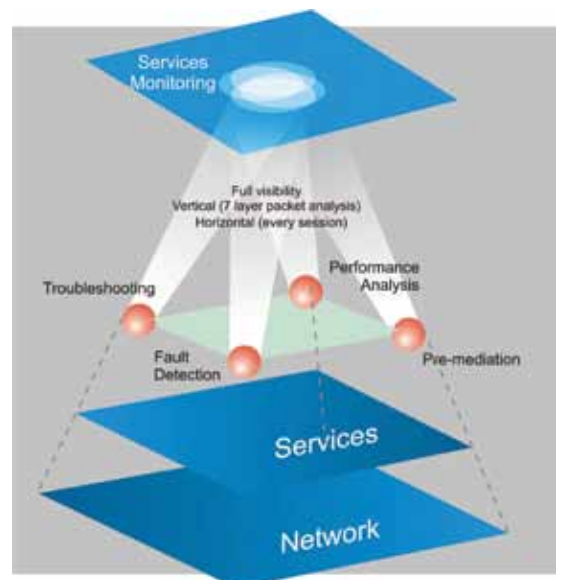
RADCOM's operations are directed from offices located in North America (Paramus, New Jersey), Israel (Tel Aviv) and China (Beijing). With over 70 distributors in 50 countries worldwide, nine manufacturer's representatives in North America and the combined experience of hundreds of skilled networking professionals, RADCOM's worldwide sales channels offer customers top expertise and support. The company serves international service providers and vendors developing communications equipment, including blue-chip customers such as France Telecom, Telefonica, Vodafone, Verizon Wireless, Hutchison, British Telecom, Deutsche Telecom, KPN, Telstra, China Mobile, Ericsson, Cisco Systems, Nortel, Alcatel-Lucent, Motorola, NSN, Huawei, and ZTE.



## Protocol Analyzers and Network Test Solutions



RADCOM's R70 Probe Platform





## RADVISION

Established in 1993 | Traded on the NASDAQ Stock Market since 2000 (RVSN)  
[www.radvision.com](http://www.radvision.com)



SCOPIA™

# Visual communications solutions and enabling technology for IP and 3G communications

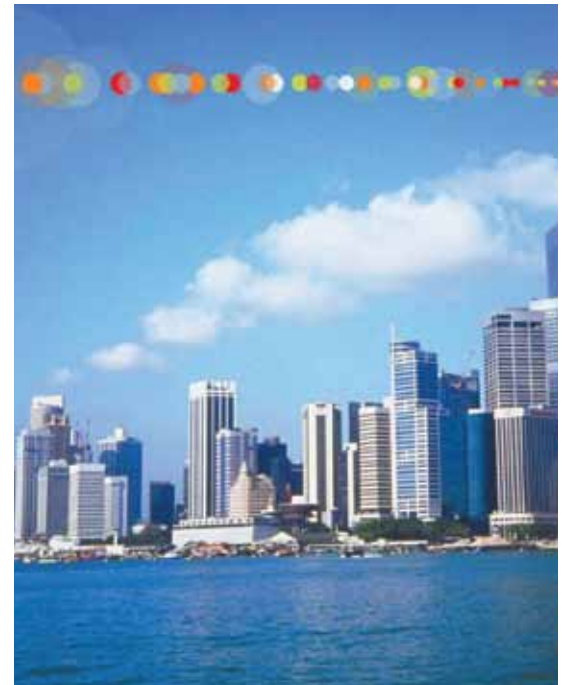
RADVISION is a leading provider of products and technologies for unified visual communications over IP, 3G and IMS networks. RADVISION offers a complete set of standards-based video networking infrastructure and developer tools. RADVISION's enterprise products and solutions are a powerful combination of advanced media processing and high scalability that support high-definition room-based videoconferencing systems and distributed desktop and mobile deployments.

- SCOPIA® Conferencing Platform – Includes Multipoint Conferencing Units (MCUs), conferencing bridges, gateways, and network management middleware. This is the industry's most technologically advanced and easy-to-use enterprise High Definition (HD) solution for real-time video communications over any network, protocol and device.
- SCOPIA® Desktop – Extends the reach of room systems powered by the SCOPIA video network platforms to distributed desktops for voice, video and data collaboration.
- SCOPIA® 3G Video Gateway – Real-time bi-directional video telephony and streaming sessions between 3G-324M mobile devices and IP or ISDN-based equipment and systems.
- iVIEW™ Suite – Video network management middleware, including scheduling and resource, infrastructure and endpoint management.
- PathFinder™ Firewall Traversal – Enables secure connectivity between enterprise networks and remote sites.

RADVISION also offers a full line of quad-play software tools, protocol stacks, client and server frameworks, and testing tools for developers of voice, video, data, and wireless IP communications devices and network equipment. These tools enable the deployment of next-generation networks, such as IMS.

## Ceragon Networks

Established in 1996 (as Gigaset) | Traded on the NASDAQ and TASE Stock Markets since 2000 (CRNT)  
[www.ceragon.com](http://www.ceragon.com)



Ceragon Networks Ltd. is a leading provider of high capacity wireless backhaul solutions that enable fiber-like connectivity for SDH/SONET networks, next-generation IP-based networks and hybrid networks. Ceragon's FibeAir® family of products supports all wired and wireless access technologies. Addressing service providers' need to cost-effectively build-out and scale their networks, Ceragon helps its customers to meet the increasing demand for bandwidth and premium services.

Ceragon's FibeAir® product family was designed with network evolution and technology in mind. These advanced solutions benefit mobile cellular infrastructure, fixed networks, and private and enterprise networks, as well as public-safety municipal and military applications. For all modern telecommunications trends, whether it's 2G, 3G, WiMAX/LTE, triple play converged services, or legacy networks, FibeAir answers the demand for future-proof backhaul connectivity.

FibeAir solutions cover the entire licensed frequency spectrum from 6 to 38 GHz. FibeAir solutions are easily upgradeable for TDM networks from 45 to 622 Mbps and for IP networks from 10 to 900 Mbps with Fast Ethernet and Gigabit Ethernet interfaces.

Ceragon's solutions are deployed by more than 150 service providers of all sizes, as well as in hundreds of private networks, in 100 countries.

**CERAGON**

**Wireless Mobile Backhaul**



FibeAir IP-10 for Risk-free Migration to IP

**Leading the  
migration to  
all-IP networks**



## Radware

Established in 1997 | Traded on the NASDAQ Stock Market since 1999 (RDWR)  
www.radware.com



Radware is the global leader in integrated application delivery solutions, assuring the full availability, maximum performance and complete security of all business-critical applications for more than 6,000 enterprises and carriers worldwide.



OnDemand Switch 3 for AppDirector

With the increased deployment of web-based applications, accelerated globalization of workforces and the influence of IT trends such as SOA, virtualization, and convergence, IT departments are being asked to deliver higher and higher levels of business agility and efficiency. Radware's APSolute™ suite of fully integrated application delivery and security products has been specifically designed to meet the most demanding, next-generation data center challenges posed by businesses today.



OnDemand Switch 3 for DefensePro

The APSolute product suite leverages an innovative OS, advanced management modules and a state-of-the-art hardware architecture to deliver unprecedented levels of intelligence, scalability, throughput, and control within both IP and SIP-based application networks. With Radware's comprehensive and award-winning APSolute suite of products, companies across all industries can drive business productivity, improve profitability and reduce IT operating and infrastructure costs by making their networks "business-smart."

# Integrated application delivery for business-smart networking

The APSolute suite includes the following products:

- AppDirector
- AppXcel
- AppXML
- SIP Director
- VirtualDirector
- LinkProof
- LinkProof Branch
- Content Inspection Director
- SecureFlow
- DefensePro
- Inflight
- Insite
- Insite ManagePro
- Application Performance Monitoring (APM)

# RADWIN

Established in 1997 | Privately Held  
www.radwin.com



RADWIN delivers wireless backhaul and broadband access solutions in the sub-6GHz space – empowering carriers and service providers with the ability to connect subscribers everywhere. Expertise in providing telco-grade TDM and Ethernet over a single wireless link has positioned RADWIN as a world leader in the sub-6GHz domain.

Dedicated to connecting the global village, RADWIN enables carriers and telcos to reach out to rural subscribers and offer enhanced service for urban areas and private networks. Whether voice, data, or video streaming – the company provides wireless broadband solutions that are of unrivalled performance, high capacity, long range, and superior quality at the most competitive prices.

Established in 1997, RADWIN provides innovative carrier-class solutions in over 100 countries around the world. Complementing the company's best-of-breed products, RADWIN provides clients with guidance and support, delivering the most effective and highest quality solutions for subscribers' needs.

RADWIN carrier-class solutions offer:

- Telco-grade TDM and Ethernet over a single wireless link
- Superior quality, high capacity and long range
- Point-to-Point and Multiple-Point-to-Point architectures
- Easy installation and maintenance
- Exceptional price offering

RADWIN's sub-6GHz wireless products are ideally suited for applications such as cellular backhaul, broadband access, private networks, and video surveillance.

# RADWIN



WinLink™ 1000 Family  
Carrier-class Sub-6GHz Radio Systems

## Wireless connectivity for the global village



# PacketLight

Established in 2000 (Joined the RAD Group in 2004) | Privately Held  
[www.packetlight.com](http://www.packetlight.com)



## CWDM/DWDM Connectivity



2 Mbps to 10 Gbps C/DWDM Solutions

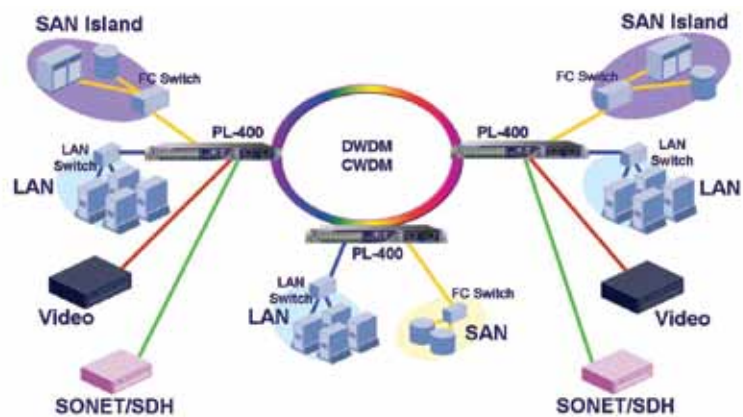
**All your CWDM  
 and DWDM  
 needs wrapped  
 in a 1U box**

PacketLight offers a suite of leading 1U metro multi-service CWDM and DWDM solutions for transport of storage, data, voice, and video applications over dark fiber and WDM networks, featuring high quality, reliability and performance at affordable prices.

PacketLight provides cost-effective CWDM and DWDM solutions in compact 1U products, with low power consumption ideal for CLE (Customer Located Equipment), allowing maximum flexibility as well as ease of maintenance and operation and providing real pay-as-you-grow architecture. PacketLight's products can be managed by any 3rd party SNMP system or by RADview EMS.

PacketLight CWDM/DWDM products are highly suitable for applications such as:

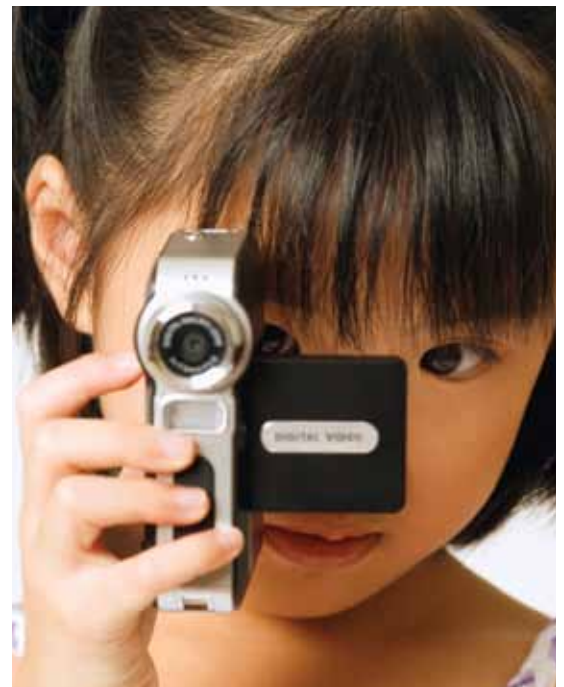
- Fiber relief for high-capacity multi-tenant buildings and campuses
- Interconnection of SAN and LAN islands over remote metro sites
- DVB-ASI, SMPTE-SDI, SD-HDI, HD-HDI video transport
- Effective infrastructure for triple play, NGN and DSLAM backhaul
- Upgrade of existing CWDM or DWDM networks to support 10G services
- Efficient upgrade of existing SDH/SONET infrastructures



WDM solution diagram

# Wisair

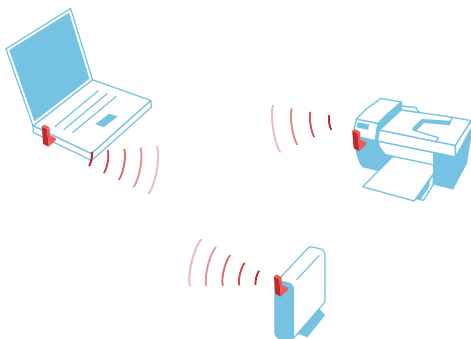
Established in 2001 | Privately Held  
www.wisair.com



Wisair is emerging as a leading provider of Ultra Wideband (UWB) and Wireless USB chipset solutions to enable low-cost, low-power, and high bit rate applications for personal computing, consumer electronics and mobile devices.

Many technologies used in the digital home, such as media transfer, digital video and audio streaming, require high bandwidth to exchange data. While portable devices are shrinking in size, they are boasting increasingly larger storage space to hold digital media, such as photos, music and movies. Ultra Wideband (UWB) and Wireless USB answer these requirements by enabling wireless connectivity with high data rates (up to 480 Mbps) across multiple devices and PCs, while addressing cost, power consumption and physical size requirements.

A pioneer in UWB technology, Wisair provides unmatched technical excellence and expertise with a complete product offering for the Wireless USB market. Based on its CMOS single chip, Wisair provides best-in-class Wireless USB solutions for notebook PCs, printers, digital still cameras, and camcorders. Wisair's complete solutions include reference designs, RF and antenna, software and drivers, and offer outstanding performance, robustness and coverage.



Wisair's technology brings Wireless USB connectivity to PCs and a range of devices in both embedded and external form factors.



**Experience REAL  
Wireless Connectivity**

**Single-chip,  
all-CMOS Wireless  
USB chipset  
solutions**



## Channelot

Founded in 2007 | Privately Held  
[www.channelot.com](http://www.channelot.com)

# CHANNELOT

**Mobile TV Transmitters**



Channelot 100 DVB-H Micro-Transmission Station

## Rewriting the rules of mobile TV deployment

Channelot is a wireless infrastructure equipment company targeting the mobile TV network market. We focus on providing mobile TV network operators with low-power transmitter-site solutions. Our products are the ideal tool for achieving robust mobile TV coverage in dense urban areas and wherever legacy broadcast equipment is either inadequate or prohibitively expensive.

To make the most efficient use of scarce spectrum resources and achieve cost-effective network coverage, broadcast mobile TV employs dedicated frequencies and special signal formats. It requires, therefore, a new transmission network that is separate from the cellular base-stations that handle mobile voice and data communications.

Broadcast mobile TV trials and initial roll-outs leverage the legacy high-power sites that serve over-the-air Digital TV (DTV) to the home. However, robust coverage in dense urban areas and inside buildings requires a more extensive transmission network. This network will rely on a much larger number of relatively low-power sites.

Channelot's mobile TV transmission site-in-a-box products go beyond the traditional single-function modules such as network interface, modulator etc to provide the fully integrated drop-in solution for the low-power and low-footprint mobile TV site.

Channelot's transmission stations are purpose-built for the demanding environment of the small, remote and unmanned site. They therefore form the ideal basis for today's and tomorrow's large-scale mobile TV deployments.

# Bynet Group

Established in 1975 | Privately Held  
www.bynet.co.il



Founded in 1975, the Bynet Group today comprises seven integration companies that are each leaders in their respective fields. Recent solutions provided by Bynet Group companies include the communication infrastructure for Israel's new international airport; establishment of an IP-VPN network for the national telephony operator, Bezeq; and numerous communication, control and security solutions for major public and private organizations.

The Bynet Group specializes in the fields of data communications, computing and telecommunications, handling complex projects that demand a high degree of integration in Israel and around the world.

The member companies of the Bynet Group are:

- **Bynet Data Communications** – telecommunications, computing and networking systems integrator
- **AB-Net Communications** – distributor of hardware and software, covering communication, security, storage, and backup solutions
- **Bynet Electronics** – provides innovative test and monitoring solutions for advanced network technologies and applications
- **Bynet Outsourcing** – outsourcing services
- **Bynet Software Systems** – software development
- **Bynet System Applications** – infrastructure, cabling and homeland security solutions
- **Internet BINAT** – multi-homing, value-added Internet service provider

**Bynet**  
DATA COMMUNICATIONS LTD

**אב-נט**  
תקשורת בעמ

**BYNET**  
ELECTRONICS  
TESTING SOLUTIONS

**בִּינֵת**  
סֵמֶל  
Outsourcing

**BYNET**  
SOFTWARE  
SYSTEMS

**בִּינֵת יישום מערכות**  
*Bynet System Applications*

**אינטרנט בינת**  
BINAT

# RADGROUP

World Leaders in Voice and  
Data Communications Technologies

Bynet Group | [www.bynet.co.il](http://www.bynet.co.il)

Ceragon Networks | [www.ceragon.com](http://www.ceragon.com)

Channelot | [www.channelot.com](http://www.channelot.com)

PacketLight | [www.packetlight.com](http://www.packetlight.com)

RAD Data Communications | [www.rad.com](http://www.rad.com)

RADCOM | [www.radcom.com](http://www.radcom.com)

RADVISION | [www.radvision.com](http://www.radvision.com)

Radware | [www.radware.com](http://www.radware.com)

RADWIN | [www.radwin.com](http://www.radwin.com)

Silicom | [www.silicom.co.il](http://www.silicom.co.il)

Wisair | [www.wisair.com](http://www.wisair.com)

## Former Members of the RAD Group

LANNET | sold to Madge, 1995 and later to Lucent, 1998

Armon | sold to Bay Networks, 1996

RADNET | sold to Siemens and Newbridge, 1997

RADLINK | sold to VocalTec, 1998

RADWIZ | sold to Terayon Communication Systems, 1999

RADLAN | sold to Marvell, 2003

RND | sold to USR Electronics, 2003

RiT Technologies | sold to Stins Coman Corporation, 2008

SANRAD | sold to OCZ Technology, 2011



**RADGROUP**

24 Raoul Wallenberg St., Tel Aviv, 69719 Israel

Tel: 972 3 645 8181 | Fax: 972 3 649 8250

Email: [radgroup@rad.com](mailto:radgroup@rad.com)



# **RAD**GROUP

World Leaders in Voice and  
Data Communications Technologies