DUONS is a world leader in point-to-multipoint (PMP) wireless access solutions.

Our products offer a reliable and field proven PMP wireless telecommunication system. They provide a high-quality voice and high-speed data for applications ranging from everyday telephone service to Internet access and industrial applications like SCADA.

Duons has installed systems in over 85 countries, with more than 3,000 SR500 networks installed around the world.
SR 500™
Point to Multipoint fixed wireless access system™

Features

Using Time Division Multiple Access (TDMA), SR500 provides telecommunication services, such as telephone, fax and data, to customers through digital microwave radio. Requiring only a single pair of frequencies, SR500 provides 60*64 Kbps channels on a demand assigned or dedicated basis to connect customers from as many as 511 sites to one central location.

Main features:
- Frequency bands: 1.3 to 2.7 GHz
  - 3.5 GHz
  - 10.5 GHz
- Integrated Backhaul
- Cumulative link range: 720 km

Benefits:
- Cost effective alternative to wire line
- Fast deployment
- Incremental growth
- Quick return on investment
- Low operating cost

SR500 provides a common platform for supporting leased lines and access to the Internet. It is perfectly suited for data applications. SR500 can distribute multiple data services over a single wireless backbone, and is completely transparent to protocols, such as PPP, TCP/IP, Frame Relay and X.25.

SR500 supports a wide range of data interfaces, including 10 base T Ethernet, V.35, X.21 and RS-232. It can provide asynchronous connections up to 19.2 Kbps or synchronous connections up to 512 Kbps (n * 64 Kbps) data rates. Several data lines can be multiplexed on a single radio timeslot.

Using aggregate E1 data interfaces, service providers can build data networks that support applications such as Internet service provisioning, leased line distribution, Frame Relay and LAN-to-LAN connections.

SR500 can serve as the backbone to a SCADA system installed along a natural gas pipeline. SR500 can also distribute telecommunication services to nearby communities.

Typical data applications supported:
- Internet service provisioning
- Public or private Frame Relay networks
- Dedicated circuit provisioning through clear data channels
- Videoconferencing + Video monitoring (CCTV)
- Remote access to centralised data resources
- LAN-to-LAN connections
SCADA (Supervisory Control and Data Acquisition)

Industrial businesses often require a full range of telecommunication services for conducting their everyday activities. In many cases though, these companies can neither depend upon nor access the public telecommunications network for services. Instead, they must build and operate their own private telecommunications network. Many multinational companies and utilities around the world have adopted SR500 as their telecommunications platform and the primary transport medium for their Supervisory Control and Data Acquisition (SCADA) systems.

Typical industrial and SCADA applications:

- Crude oil and natural gas industries
- Electric utilities
- Water management
- Resource industries

Services and Features

- Standard 2-wire connections for telephone, fax and modem transmission.
- 4-wire with or without E&M signalling for trunking PBXs or mobile telecommunication systems.
- Asynchronous and synchronous data interfaces for connecting SCADA remote terminal units (RTUs) and data communications equipment.
- Data subtrunking allowing several low-speed terminals such as RTUs to share a single radio timeslot.
- Synchronous V.35 or 10 base T Ethernet data interfaces for connecting video surveillance systems which deliver full-motion video images and camera-control signals.
- Push-to-talk (PTT) option for linking the SCADA master terminal unit to many RTUs using a single radio timeslot.
- Aggregate E1 data interface for applications requiring high-speed data transmission such as videoconferencing, Internet and intranet access.
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SR500 Family of products

Central station & High capacity central station

The central station controls all operations of the SR500 subsystem. A range of options allows service providers to configure the central station for their specific network requirements.

- V5.2 PSTN digital interface concentrated over groups of two E1 (2.048 Mbps) links
- Non-concentrated PSTN digital interface with CAS signalling
- 1+1 protection
- Echo cancellation
- Orderwire
- Channelized E1 for data

The High-Capacity central station (as shown opposite) is a multi-carrier, scalable telecommunications system that supports digital network interfaces. It provides up to 32 Mbps of bandwidth. It is up to 8 central stations.

Out stations

Outstations terminate the radio frequency (RF) link and connect customers to the telecommunications network. Using wireline and a combination of both, voice and data services can be distributed to customers.

Repeaters

Repeaters extend the service coverage beyond the line-of-sight. In addition, repeaters can provide voice and data services to remote customers.

Features for outstations and repeaters
- Solar-power option for outstations
- 1+1 Option
- Indoor and outdoor outstations

Insight Network Manager™

Insight is a network management application that provides transaction based network management functionality on our products. Insight is based on client/server architecture and runs on Windows. Windows platform enables Insight to operate on workstations.