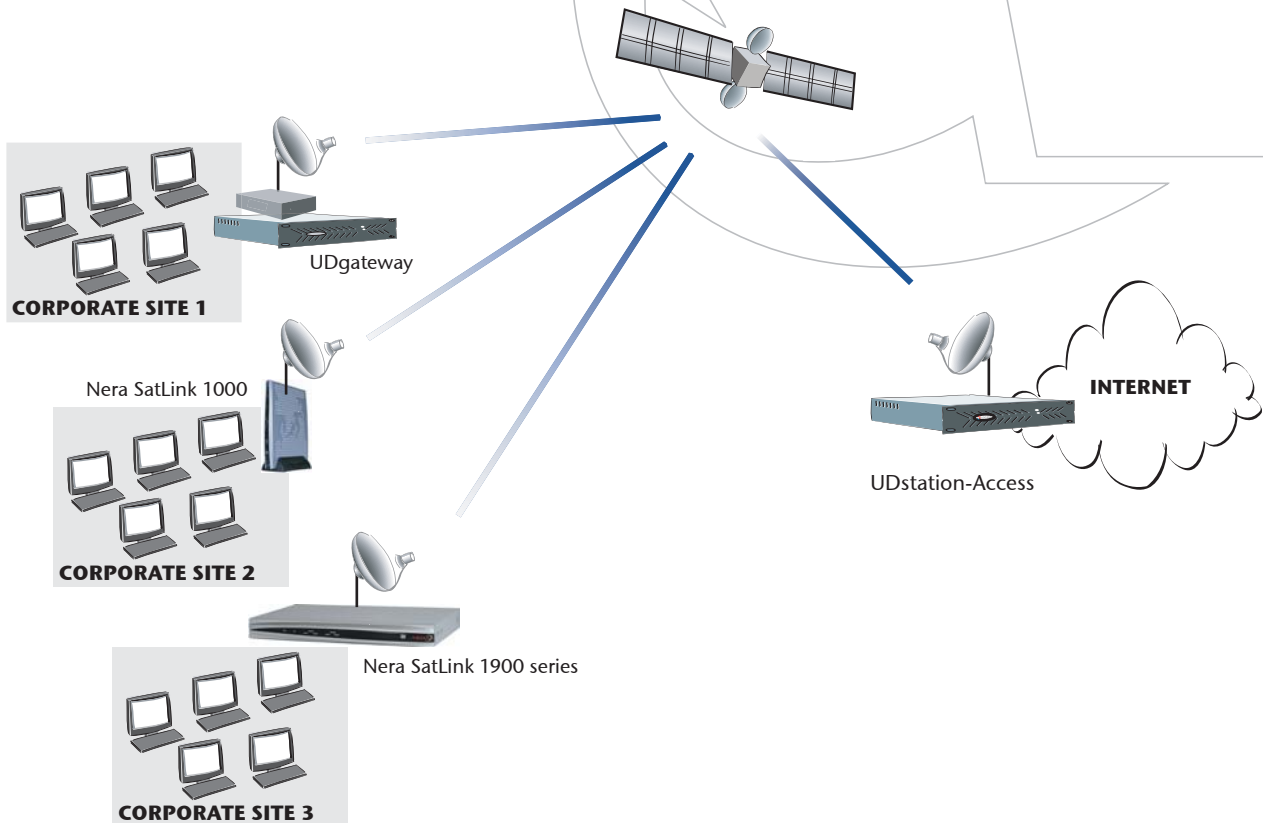


# UDstation-Access

Satellite Hub IP Acceleration



## DESCRIPTION

**The UDstation<sup>®</sup>-Access is a central appliance located at the satellite hub. It is the key product companion for the UDgateways<sup>®</sup> located at the end-customer sites delivering enhanced broadband Internet access over two-way satellite systems. This appliance is shared by all the connected UDgateways<sup>®</sup> and provides the necessary server side/hub elements for full functionality.**

Thanks to the UDstation<sup>®</sup>-Access appliance, in conjunction with the UDgateway<sup>®</sup> appliances, service providers can provide premium type services with key benefits for both the service provider and the end-customers. Amongst these are strong network security, on the fly IP traffic compression and valuable performance enhancement. The UDstation<sup>®</sup>-Access implements global performance enhancement through TCP acceleration and data compression, central security control and enforcement through site authentication and key distri-

bution, as well as essential installed base administration tools such as the ability to carry out remote software upgrades.

The UDstation<sup>®</sup>-Access appliance is highly flexible ensuring easy integration with the service provider's hub and fully adapting to specific needs and constraints. The appliance can also be located close to the hub, for example in a public IP zone, in order to reduce the risk of impacting the existing satellite system. Through the use of the UDstation<sup>®</sup>-Access the service provider can choose which end-customer sites benefit from a premium service enabled by UDgateways<sup>®</sup>, and which do not, thus delivering two classes of service from a same hub.

Based on a powerful hardware platform, the UDstation<sup>®</sup>-Access appliance is designed for the satellite service provider. Each appliance can support up to a full satellite transponder capacity. The redundant and hot-switching feature of the UDstation<sup>®</sup>-Access appliance ensures minimal service interruption.

## FEATURES & BENEFITS

### PERFORMANCE ENHANCEMENT

#### > Shared TCP accelerator server

- Peer for all UDgateways or Nera terminals located on end-customer site
- Deliver optimized end-user experience for every UDgateway equipped site

#### > Bandwidth saving

- Allow all UDgateways to reduce TCP acknowledgements over satellite by regenerating ACKs transparently on the Internet side
- Compress/uncompress traffic over satellite to/from UDgateways

#### > Service management

- SLA enforcement
- Online service monitoring

### CENTRAL CONTROL

#### > Site authentication

- Centrally manage access rights based on the UDgateway's digital certificates
- Strongly authenticate end-customer sites

#### > Satellite link encryption

- Dynamically distribute traffic encryption keys
- Scramble satellite traffic to unauthorized third parties

#### > Software version distribution

- Centrally manage software upgrade distribution to selected UDgateways
- Simplified installed based administration

## SPECIFICATIONS

### IP Features

- IP routing
- Traffic sharing at uplink rate
- SLA enforcement
- TCP acceleration server
- Central compression end-point
- Link monitoring probe
- TCP & HTTP acceleration compability with the Nera SatLink 1900-series" and 1000 models
- TCP session capacity: 4000 connections max between the UDstation and terminals
- 4 models: Bandwidth limitation 5Mbps, 10Mbps, 20 Mbps or 45 Mbps

### Security Features

- Link encryption central end-point - IPsec with AES
- Central site authentication management X.509 digital certificate
- Dynamic key distribution management multicast-based

### Integration

- Interoperability with any IPE - IP encapsulator
- Can be integrated in any public IP location at or near the hub
- Can be inserted in-line to control all IP traffic
- Redundancy accross 2 UDstations: VRRP-based fail-over. Automatic configuration synchronization.

### Administration Features

- Web-based administration
- SNMP v2 management. Automatic configuration for the addition of new terminals
- Installed base software update server multicast-based

### Hardware Specifications

- 2 Ethernet 10/100 BaseT
- 3rd generation Intel® Processor
- Hard Disk: 40 GB
- Memory: 1 GB
- Power supply: 250W - Autoswitch 100-240 VAC (47-63 Hz)
- Weight: 44 lbs (20 kg)
- Dimensions: 2U(H) x 17.7"(L) x 19"(W)  
88 mm x450 mm x 483 mm
- Option: Integrated IP Encapsulation Card - ASI output

### Operating environment

- Temperature: +15°C to 30°C
- Humidity: 10 to 80%
- Safety: EMC compliance, FCC, UL, CUL, CSA, BSMI
- MTBF: 50.000 h at 25°C
- Cooling fans