The UDgateway® is the first all-in-one appliance which is specifically adapted to broadband satellite-delivered Internet access. All IP key features such as addressing and routing, security, caching, and performance enhancement are embedded in the appliance. UDcast’s best-of-breed core technology provides an enhanced end-user experience, based on TCP acceleration, HTTP pre-fetching, as well as web and DNS caching.

The UDgateway® appliance functions with any two-way satellite system. It sits between the indoor unit and the local area network, and handles all Internet access traffic coming from the corporate site. Designed to be easily installed, configuration is done via a web-based interface. A wizard automates the setup process, requiring the input of just a few parameters. While a variety of two-way systems are supported, close integration with DVB-RCS systems has been developed.
Features / Benefits

- **Performance enhancement**
  - Delivers true broadband quality, to guarantee customer satisfaction
  - Bandwidth optimization in both directions, generating cost savings
- **Security**
  - Full Internet access protection for the entire site
  - Masquerading the Local Area Network from the outside world
- **Address Management**
  - Private to public network address translation
  - Dynamic private IP address assignment
- **Two-way systems adaptation**
  - Return path optimization (ACK suppression and DNS caching)
  - Specific DVB-RCS IDU recognition and adaptation

Enhanced end-user experience

- **TCP acceleration**
  - Reduced data transfer times
  - Full utilization of valuable bandwidth capacity
- **HTTP Pre-fetching**
  - Parallel downloads of all embedded frames/objects for each web page
  - Instantaneous web page display
- **Caching**
  - Get once, local reuse of frequently accessed web pages
  - Single DNS name for address resolution, to be then shared locally
- **Mail relay**
  - Immediate user mail delivery to local SMTP relay
  - Background mail forwarding on return link

Specifications

- **IP features**
  - Complete IP v4 stack and IP routing
  - NAT (Network Address Translation) with port forwarding
  - Kernel based statefull inspection of Firewall, including anti-spoofing and appliance protection
  - Strong firewall-NAT configuration coupling
  - TCP accelerator and HTTP pre-fetching with HTTP cache and DNS cache
  - SMTP mail relay
  - DHCP server on LAN (dynamic IP address assignment + Default gateway’s & DNS server’s & WINS server’s IP address assignment)
  - DVB-RCS IDU detection and integration
- **Administration features**
  - CLI and web-based configuration with remote SSH and web secured access
  - Setup wizard with auto configuration
  - SNMP/MIB support
- **Network interfaces**
  - 2 Ethernet 10/100 BaseT (1 for LAN switch and 1 for two-way IDU with back to back cable)
  - Serial Interface: RS-232 (DB9-pin male) for external modem (out of band management)
- **Hardware Specification**
  - Net-PC Case
  - Based on most recent PC specifications including 3rd generation Intel® Processor
  - Hard Disk: 20 GB
  - Memory: 128 MB
  - Power supply: 90W (110/240VAC) (43-63 Hz)
  - Weight: 11 lbs (5 kg)
  - Dimensions: 3.1”(H) x 11.81”(L) x 12.6” (W)
  - 78 x 300 x 320 mm
- **Operating environment**
  - Temperature: +10°C to 40°C
  - Humidity: 10 to 80%
  - Atmosphere: 20-95%
  - Safety: FCC, CE, CSA
  - MTBF: 40.000 h at 25°C
  - Cooling Fans
  - Case Intrusion Alarm Protection
- **System Hardware Monitor**
  - CPU Temperature, CPU Fan
  - Case Temperature, Case Fan