

# VXT1820 802.11n Video Extender



## Carrier-Grade, WiFi system for multi-stream HD IPTV Home Distribution

The Celeno VXT1820 video bridge is a carrier-grade WiFi based HD video system designed to reliably distribute multiple High Definition IP video streams (IPTV) throughout the home. This simple, robust multimedia home networking solution provides users with a high quality viewing experience. This cost-effective solution eliminates the cost and hassle of installing new wires.

The VXT1820 enables reliable and robust connectivity of HD and SD IPTV streams from Ethernet-equipped broadband gateway or DVR to multiple IP set top boxes. Self-installable and fully interoperable with common IPTV servers, middlewares and set top boxes, VXT1820 allows operators to accelerate deployment schedules and reduce opex by eliminating expensive truck rolls.



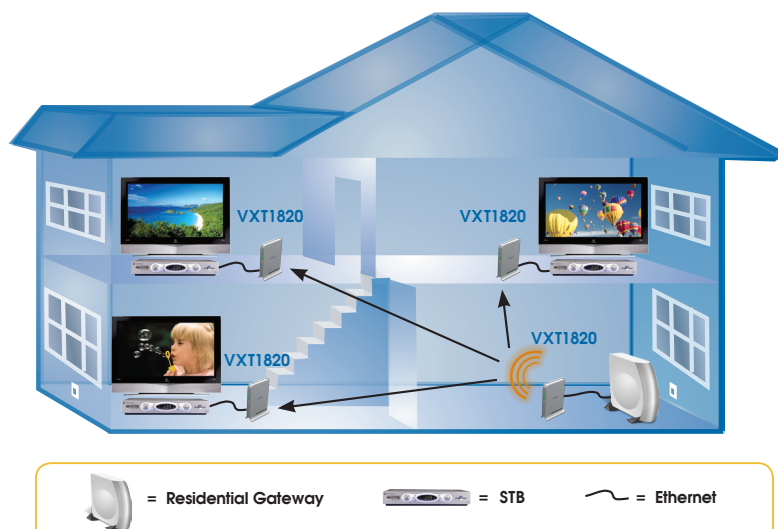
### Enhancing the HD Experience

- Wire-like video experience
- Whole home coverage without dead spots
- Superior interference immunity and trouble-free co-existence with neighboring systems
- Solves throughput bottleneck for wireless multi-room DVR support
- Easily self installed with plug & play operation
- Unique "base station" approach enables VXT1820 AP to support migration to integrated WiFi set top boxes

### Carrier-Grade Feature Set

- Real time Transmit Digital Beam Forming MIMO
- Antenna diversity (4 Antenna elements) for maximum robustness
- Advanced interference detection and fast automatic channel scanning and hopping
- Advanced regulatory requirements support including Dynamic Frequency Selection (DFS)
- DLS support for MR-DVR support
- IGMP snooping, Multicast to Unicast translation and WDS support for seamless IPTV network integration
- WPS for simple setup and security configuration

### IPTV WiFi Home Networking



## Specifications

### Physical Characteristics

**Power (external power adapter):** 12VDC, 1A

**Antennas:** Internal antenna array with 4 Omni-directional elements

**Chipset:** Single-chip design CL1820 2x3 802.11n

**Ethernet ports:** 100 Mbps, RJ-45 port, Automatic MDI/MDIX

**LED display:** Power, Ethernet, Wireless, Video link quality

**Control buttons:** WPS push button, Reset button

**Operating temperature:** 0° - 40° C

**Humidity:** 10% - 90% (Non condensing)

**Certifications:** FCC (US), CE (Europe)

### Management

**Configuration:** Web-based GUI management, CLI(Telnet), TR-069

**Software upgrade:** Web-based

### WiFi

**Operating frequencies:** 4.9 – 5.8GHz, complies with 802.11h radar detection

**Security:** WPA2 (AES)

**Channels:** Country dependent for the following channel ranges: 36-64 , 100-140 , 149-165

**Automatic transmit power control:** Supported

**Country specific power limits:** Supported

### OptimizAIR™ - Breakthrough Technology for Best Performance

Celeno VXT1820 employs cross-layer optimization of special PHY, MAC and smart antenna technologies to achieve dramatic increases in range and coverage, typically exceeding off the shelf 802.11n systems' HD performance by over 500%.

Industry-first Phased-Array transmit beam forming MIMO technology delivers long reach and high HD throughput with zero packet error rate. Unlike other solutions, the VXT1820 is completely channel aware with special silicon-based real-time processing that optimizes performance. It manages the radio power budget, transmission rate and detects noise levels to optimally deliver multiple HD video streams in the home.



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