

Vigor 2820 Series - Technical Specification

- Physical Interfaces:
 - LAN Ports (Switch)
 - 1 X Gigabit Ethernet (1000Mb/s) Ports
 - 3 X Megabit (100Mb/s) Ports
 - Port-Based VLAN (Inclusive/Exclusive Groups)
 - WAN Ports:
 - ADSL Port Compliant with:
 - ANSI T1.413 Issue2
 - ITU-T G.992.1 G.dmt (ADSL)
 - ITU-T G.992.2 G.lite
 - ITU-T G.992.3 ADSL2
 - ITU-T G.992.5 ADSL2+
 - Annex L (READSL)
 - Annex A
 - Annex M
 - ANFP Issue 3 Compliant/Certified (for Annex A & Annex M)
 - Secondary WAN Port : 10/100 Base-TX Ethernet for load balance and WAN failover
 - USB Port for 3G Cellular Modem or Printer
 - VoIP: 2-port FXS Phone Ports (Vigor2820Vn / VSn only)
 - Load Balance/Failover Features:
 - Outbound Policy-Based Load-Balance
 - WAN Connection Fail-over
 - BoD (Bandwidth on Demand)
 - Vigor 2820 ATM Protocols (DSL):
 - RFC-2684/RFC-1483 Multiple Protocol over AAL5
 - RFC-2516 PPP over Ethernet
 - RFC-2364 PPP over AAL5
 - PPPoE pass through LAN/WLAN
 - PPPoE/PPPoA Relay (ADSL Bridge; feature due Autumn 2009 ETA)
 - Transparent bridge for MPoA
 - Multiple PVC support for Triple Play Applications (up to 8 simultaneous)
 - Wireless LAN Features ('n' Models Only):
 - 802.11n Compliant (Draft 2.0)
 - Latest 'MIMO' Technology with three aerials (2T3R)
 - Multiple SSID : Create up to 4 virtual wireless LANs (independent or joined)
 - Packet Aggregation and Channel Bonding
 - Optional Higher Gain or directional aerials available - [Click Here](#).
 - Compatible with 802.11b and 802.11g Standards
 - Active Client list in Web Interface
 - Wireless LAN Isolation (from VLAN groups and wired Ethernet interfaces)
 - 64/128-bit WEP Encryption
 - WPA/WPA2 Encryption
 - Switchable Hidden SSID
 - Restricted access list for clients (by MAC address)
 - Time Scheduling (WLAN can be disabled at certain times of day)
 - Access Point Discovery
 - WDS (Wireless Distribution system) for WLAN Bridging and Repeating (Firmware Upgradable)
 - 802.1x Radius Authentication
 - Wireless Rate-Control
 - Automatic Power Management
 - 802.11e WMM (Wi-Fi Multimedia)
 - VoIP Features (Vigor2820 'V' Models only):
 - Protocols: SIP, RTP / RTCP
 - 12 SIP Registrar Accounts (for up to 12 VoIP providers)
 - Line port for PSTN Passthrough (integrates POTS line)
 - Auto-fallback to PSTN under power/Internet failure
 - G.168 Line Echo-cancellation
 - Automatic Gain Control
 - Jitter Buffer (125ms)

- Voice Codecs:
 - G.711 A / μ Law
 - G.723.1
 - G.726
 - G.729 A / B
 - VAD / CNG
 - Tone Generation: DTMF , Dial , Busy , Ring Back , Call Progress
 - DTMF Transmission: In Band / Out Band (RFC-2833) / SIP info
 - FAX / Modem Support G.711 Pass-through
 - T.38 for FAX
 - Supplemental Services:
 - Caller ID
 - Call Hold / Retrieve
 - Call Waiting
 - Call Waiting with Caller ID
 - Call Transfer
 - Call Forwarding (Always , On Busy and On No Answer)
 - DND (Do not Disturb)
 - Call Barring (Incoming / Outgoing)
 - MWI (Message Waiting Indicator) (RFC-3842)
 - Hotline (Dial preset number when handset lifted)
- WAN Protocols (Ethernet):
 - DHCP Client
 - Static IP
 - PPPoE
 - PPTP
 - L2TP *
 - BPA
- Firewall & Security Features:
 - CSM (Content Security Management):
 - URL Keyword Filtering - Whitelist or Blacklist specific sites or keywords in URLs
 - Block Web sites by category (e.g. Adult, Gambling etc. Subject to subscription)
 - Prevent accessing of web sites by using their direct IP address (thus URLs only)
 - Blocking automatic download of Java applets and ActiveX controls
 - Blocking of web site cookies
 - Block http downloads of file types :
 - Binary Executable : .EXE / .COM / .BAT / .SCR / .PIF
 - Compressed : .ZIP / .SIT / .ARC / .CAB/. ARJ / .RAR
 - Multimedia : .MOV / .MP3 / .MPEG / .MPG / .WMV / .WAV / .RAM / .RA / .RM / .AVI / .AU
 - Time Schedules for enabling/disabling the restrictions
 - Block P2P (Peer-to-Peer) file sharing programs (e.g. Kazza, WinMX etc.)
 - Block Instant Messaging programs (e.g. IRC, MSN/Yahoo Messenger etc.)
 - Multi-NAT, DMZ Host
 - Port Redirection and Open Port Configuration
 - Policy-Based Firewall
 - MAC Address Filter
 - SPI (Stateful Packet Inspection) with new FlowTrack Mechanism
 - DoS / DDoS Protection
 - IP Address Anti-spoofing
 - E-Mail Alert and Logging via Syslog
 - Bind IP to MAC Address
- Bandwidth Management:
 - QoS
 - Guaranteed Bandwidth for VoIP
 - Class-based Bandwidth Guarantee by User-Defined Traffic Categories
 - DiffServ Code Point Classifying
 - 4-level Priority for each Direction (Inbound / Outbound)
 - Bandwidth Borrowed
 - Temporary (5 minute) Quick Blocking of any LAN Client
 - Bandwidth / Session Limitation

- Network/Router Management:
 - Web-Based User Interface (HTTP / HTTPS)
 - CLI (Command Line Interface) / Telnet / SSH*
 - Administration Access Control
 - Configuration Backup / Restore
 - Built-in Diagnostic Function
 - Firmware Upgrade via TFTP / FTP
 - Logging via Syslog
 - SNMP Management with MIB-II
 - TR-069
 - TR-104
- VPN Facilities:
 - Up to 32 Concurrent VPN Tunnels (incoming or outgoing)
 - Tunneling Protocols: PPTP, IPSec, L2TP, L2TP over IPSec
 - IPSec Main and Agressive modes
 - Encryption : MPPE and Hardware-Based AES / DES / 3DES
 - Authentication : Hardware-Based MD5 and SHA-1
 - IKE Authentication : Pre-shared Key and X.509 Digital Signature
 - LAN-to-LAN & Teleworker-to-LAN connectivity
 - DHCP over IPSec
 - NAT-Traversal (NAT-T)
 - Dead Peer Detection (DPD)
 - VPN Pass-Through
- Network Features:
 - DHCP Client / Relay / Server
 - Dynamic DNS
 - NTP Client (Synchronise Router Time)
 - Call Scheduling (Enable/Trigger Internet Access by Time)
 - RADIUS Client
 - DNS Cache / Proxy
 - Microsoft™ UPnP Support
- Routing Protocols:
 - Static Routing
 - RIP V2
- Operating Requirements:
 - Rack Mountable (Optional Vigor 2820 mounting bracket required)
 - Wall Mountable
 - Temperature Operating : 0°C ~ 45°C
 - Storage : -25°C ~ 70°C
 - Humidity 10% ~ 90% (non-condensing)
 - Power Consumption: 18 Watt Max.
 - Dimensions: L240.96 * W165.07 * H43.96 (mm)
 - Operating Power: DC 15V (via external PSU, supplied)
 - Warranty : Two (2) Years RTB
 - Power Requirements : 220-240VAC