NextAccess

PRODUCT DATASHEET

GIGACOAX

6-Port GigaCoax Headend

NA1006CS

G.hn Wave2 indoor master for Ethernet over coax



6	16	10G	<40 W
G.hn coax ports	CPE per port	SFP+ uplink	power draw

OVERVIEW

The NA1006CS turns a building's existing coaxial TV distribution network into a gigabit access network. Installed in the comms room on a 10G fibre uplink, it delivers fibre-class service to every apartment over the coax already in the walls — without the labour, disruption and delay of rewiring each unit.

Each of its six G.hn Wave2 ports serves up to 16 NextAccess coax NTUs, with up to 1.7 Gb/s of actual throughput in the 2–200 MHz band. It is a fully managed Layer 2 access switch with per-subscriber QoS, VLANs, IPTV multicast and DHCP Option 82, and it configures and upgrades every connected NTU centrally.

KEY FEATURES

- Up to 2 Gb/s PHY rate, 1.7 Gb/s actual throughput over coax
- 96 subscribers per 1U chassis (6 ports × 16 CPE)
- Coexists with existing RF/TV services via frequency notching
- Flexible uplink/downlink bandwidth allocation and per-subscriber SLA
- Retrofit IPTV, Internet and VoIP over existing coax
- Centralised NTU monitoring, configuration and firmware upgrade

SPECIFICATIONS

Hardware

Architecture	G.hn Wave2 EoC master
G.hn ports	6 × F-type, up to 16 CPE each
Uplink	1 × 1000-X / 10G-X SFP/SFP+
Ethernet	2 × 10/100/1000BASE-T RJ45
Console	1 × RS232 (RJ45)
LEDs	Power, system, SFP link/act, management link/act, G.hn link
Dimensions	320 × 234 × 45 mm
Weight	1.85 kg
Power input	100–240 VAC, 50/60 Hz
Power consumption	< 40 W

Environment

Operating temperature	0 °C to 50 °C
Storage temperature	−25 °C to 80 °C
Operating humidity	10% to 90% non-condensing

G.hn performance

Technology	ITU-T G.hn Wave2
Line modulation	OFDM (Orthogonal Frequency Division Multiplexing)
Spectrum	2–200 MHz baseband
Spectrum management	– Power-mask notching – Dynamic PSD – NDIM (neighbour-domain interference mitigation) radio-band notching – NEXT (near-end crosstalk) mitigation

Switching

MAC table	16K
VLANs	4K, 256 VLAN groups
Layer 2	– 802.1w RSTP, MSTP – 802.1D Spanning Tree – 802.1Q VLAN – 802.3ad link aggregation (8 groups × 8 members) – Jumbo frames up to 9K

Multicast & DHCP

Multicast	– IGMP snooping v1/v2 – Up to 512 multicast groups – Multicast traffic block / filtering – Protection from malicious multicast on subscriber ports
DHCP	– DHCP request-flood protection (snooping rate-limit) – Option 82 — Circuit-ID: subscriber port · Remote-ID: relay MAC

Security, QoS & ACL

Security	– DLF / broadcast protection – DHCP, MAC and NetBIOS/NetBEUI/NBT filtering – IP/TCP/UDP port filtering – Flooding protection (static MAC, MAC count) – Control-packet classification – 8 CPU queues with CPU rate-limit
QoS	– L2 classification: src/dst MAC, VLAN ID, CoS – L3 classification: src/dst IP, DSCP – 8 queues per port – SPQ, WRR, SPQ + SDWRR – DSCP marking / remarking
ACL	128 ingress ACL entries

Management

Interfaces	– Web GUI – CLI via console and Telnet – Three administrator privilege levels
Protocols	– SNMP v1/v2c/v3 and traps – RMON, Syslog, SNTP – TFTP – Port mirroring
Operations	– Remote firmware upgrade for headend and CPE – Configuration backup / restore – Factory restore and reboot – SFP/SFP+ DDMI diagnostics

ORDERING INFORMATION

NA1006CS	6-port G.hn Wave2 indoor coax headend: 6 × G.hn F-type, 1 × SFP/SFP+, 2 × GE RJ45, RS232 console

Related products: NA1001C · NA1004C · NA1008CO

Talk to NextAccess

Pre-qualification, evaluation kits and volume pricing for ISPs, integrators and building owners.

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