MoCA Access DPU

Point to Multipoint DPU for up to 31 virtual ports over a shared coax network

Scalable for 8/16/31 modems from small to medium MDU's

Can support up to 1 Gbps symmetrical capacity

Remote management over NETCONF/YANG or TR-069

KEY FEATURES

- 10G XGS-PON, GPON or AON uplink options
- Provides Gigabit or MultiGigabit services over the coax network
- Support symmetrical services
- Scalable with 8/16/31 virtual ports option
- Supports Pre-set or Dynamical QoS
- Zero Touch Provisioning
- NETCONF/YANG or TR-069 Management
- Use available in-building coaxial network spectrum
- Supports IPTV services or co-existance with existing TV-services
- IP67 enclosure for outdoor or indoor installation
- Passive cooling

InCoax D2501

InCoax D2501 allows service providers to realize Gigabit symmetrical broadband speeds over existing coaxial infrastructure. It rapidly enables high speed communications and entertainment services to subscribers. Provides IPTV services and can also co-exist with legacy TV services for faster adoption.

InCoax D2501 is re-using available in-building coaxial network spectrum and it supports any type of coaxial topology. It is available with 8, 16 or 31 virtual ports supporting positive operator business case for only a small number of served subscribers.

D2501 is a robust and reliable network element that can be deployed in pedestals, on poles, or within the building location where in-building coaxial networks initiates.

Several management options are available to support current management models over NETCONF/YANG which is communicating with operator Persistent Management Agent Aggregator (PMAA).

D2501 also supports TR-069 in deployments where an ACS is available for management and provisioning. For monitoring it supports SNMP.

D2501 supports several up-link options as XGS-PON, GPON, Active Optical Networks with 1 /2.5/10 Gigabit northbound link speed.

D2501 is cost-efficient fiber access extension with Zero Touch Provisioning to reduce deployment costs and remote management and monotoring to support long term operation. Remote management reduce the need for truck roll-out/site visits.

The customer self-installable modem is automatically connecting to the DPU virtual port and is automatically provisioned. Modems are available with 1 Gigabit Ethernet port and optional WiFi available (soon).

TECHNICAL SPECIFICATIONS

Physical ports
- Single SFP+ slot inside enclosure: Multi Source Agreement (MSA) Compliant
- XGS-PON, GPON, Active Ethernet 1.0/ 2.5 /10 Gbps
- Single Ethernet port inside enclosure: 1.0/ 2.5Gbps local management
- PG-11 Cable Gland for optical fiber cable.
- PG-11 F-female Connector for MoCA Access 2.5 signal - 3/8-UNEF32, 75 Ω

Management
- TR-069; SNMP; NETCONF/YANG; OMCI; SNMP
- Remotely upgradable

QoS
- Traffic classification
- Mapping and remarking
- Strict priority, four separate queues for DS/US

VLAN
- Supports both S-tag and C-tag Ethertype values
- Supports VLAN tag addition, removal, or translation
- Strict priority, four separate queues for Broadcast, Multicast and Unicast

Multicast
- IP multicast groups per multicast VLAN based on source or group address
- IGMP snooping v2, v3

MoCa Access 2.5 Compliant
- 2.5 Gbps coax link throughput at S/N ratio 30dB
- 3.0 Gbps coax link throughput at S/N ratio 40dB
- Max 31 Modems
- MoCA Bands: A-A, A-AH, A-AS, A-B, A-C, A-D, A-E
- Frequency range: 400 - 1675 MHz
- Bonded operation with 3, 4 or 5 RF-channels
- MAC coax link rate typically 1,5 / 2,0 / 2,5 Gbps
- 17 dBm Max Output Power; autom. adj. per modem
- Configurable beacon frequency

Performance
- Roundtrip average Latency 6ms
- 100% link quality up to 60dB link attenuation
- Configurable Downstream / Upstream ratio to support symmetrical 1Gps services
- Supports IPv4, IPv6 or dual IPv4 & IPv6 stack

Performance Monitoring
- Supports counters for coax link attenuation and RX/TX errors to each modem
- Built in spectrum analyzer

Indicators / sensors
- Power on-, Management, SFP traffic, Coax Link traffic, Boot and ZTP activity
- Temperature sensor, Humidity sensor, front cover Open/Close detection sensor, power consumption sensor

Dimensions & Weight
- 257 × 203 × 100 mm (W × H × D)
- 3 kg

Environmental
- Operating Temperature: -25 °C to +70 °C
- Passive cooling
- Humidity: 20% to 80%
- Storage (non-cond.): -40 °C to +70 °C & 5% to 90%
- RoHS2, UL94-V0
- IP67 waterproof, dust proof outdoor housing

Power
- In-build power module 90-230VAC /12 V 1.9A nominal
- Power input F-connector 12-25V, 1A
- Power consumption maximum 15 W
- Power cables US, EU or UK power plug

Reliability
- >300.000 hours at 25°C Telcordia SR-332

IEEE Standards
- IEEE 802.3 (Ethernet); IEEE 802.3u (Fast Ethernet); IEEE 802.1p (Priority tags); IEEE 802.1q (VLAN with full VLAN-ID range. Configurable internal VLAN for policing, shaping, and prioritization for ingress untagged frames); IEEE 802.1ad (QinQ)

IETF Standards
- RFC 6241 - Network Configuration Protocol (NETCONF)
- RFC 7950 - The YANG 1.1 Data Modeling Language
- RFC 3315 - Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
- RFC 4604 - Using Internet Group Management Protocol Version 3 (IGMPv3) and
- Multicast Listener Discovery Protocol Version 2 (MLDv2) for Source-Specific Multicast

Approvals
- FCC Part 15 Class B; UL 62368; EN300386; EN55032:2012 (Class B); EN55035:2017; EN61000-6-4:2007+A1:2011 & EN61000-62:2005; EN62368-1:2014

About InCoax Networks

InCoax Networks is innovating the reuse of existing in-building infrastructure for broadband access.
We provide the next-generation MultiGigabit networking solutions to the world's leading telecom and broadband service operators.

For additional information visit; **inxtnd.com**

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