

# N4000 DSLAM

## SHDSL EFM & ATM mode 24 ports, 15/15 Mbps per port



DCombus N4000 is a DSLAM for SHDSL EFM applications supporting also the atm mode SHDSL. It's 1U high rack mountable unit with fixed number of subscriber ports. The N4000 achieves max 15/15 Mbps per copper pair making the system ideal for implementing high performance broadband connections with quickly deployable twisted copper pairs. There are 24 ports for 1-copper pair, also supporting 2, 3 and 4-copper pairs SHDSL subscriber ports. Two gigabit uplink ports selectable either copper or fiber.

The N4000 DSLAM is ideal for broadband service providers offering SHDSL EFM and SHDSL ITU-T G.991.2 atm mode services with the same DSLAM.

The DCombus N4000 DSLAM supports SHDSL EFM modems such as IRIS 520/540, SHDSL EFM and atm modes.

### Main Properties

- N4000 DSLAM for high performance Ethernet over copper subscriber services with SHDSL EFM/ATM mode
- 24 SHDSL ports with 1-copper pair
- Flexible support for 1, 2, 3 and 4 copper pair ports
- Max 15/15 Mbps per copper pair subscriber port
- Max 60/60 Mbps per 4-pair bonded subscriber port
- Two uplink ports, 10/100/1000Base-T Eth or 1000Base-X GbE (SFP), selectable
- IEEE 802.3ah Ethernet in the First Mile (EFM), ITU-T G.991.2

### Main Applications

- Symmetrical broadband access for managed Eth services
- Operator and ISP provided broadband services for businesses, SMEs, branch offices, etc.
- Mobile networks basestation IP/Ethernet backhaul
- Scalable Ethernet over copper services
- Business critical Ethernet services
- High performance IP camera and surveillance networks
- Campus networks for extended Ethernet/LAN networks

### Products, Options

- Available with 230 VAC or 48 VDC power supply unit
- Telco50 cable, 50-pin, 24 port SHDSL line cable

### TECHNICAL SPECIFICATIONS

#### N4000 mechanics

- 1U high, 19" rack mountable
- Dimensions 44 x 440 x 300 mm
- Weight 4.5 kg

#### Subscriber ports

- 24 ports for 1-copper pair
- Flexible copper pair bonding: each 4-pair group can be 4x 1-pair; 1x 2-pair + 2x 1-pair; 2x 2-pair; or 1x 4-pair
- Max 15/15 Mbps per copper pair in EFM mode, TC-PAM 16/32/64/128
- Max 5.7/5.7 Mbps per copper pair in ITU-T atm mode, TC-PAM 16/32

#### Uplink and Management

- 2x gigabit uplink ports: optical (SFP), copper (RJ45)
- Local console serial port
- Management 10/100 Eth port
- Web browser based UI, CLI, SNMP v1/2c
- Fan status, board temperature monitoring

#### Protocols support

- IEEE 802.1p, 802.1D, 802.1Q, VLAN stacking Q-in-Q
- IEEE 802.1x
- STP (802.1D), RSTP (802.1w)
- IGMP v1/v2/v3 snooping and proxy
- SNMP, syslog
- MTU 1536

#### Power, environmental

- 90 - 240 VAC 50/60 Hz, or -42 to -56 VDC (optional)
- Max power consumption 70 Watts