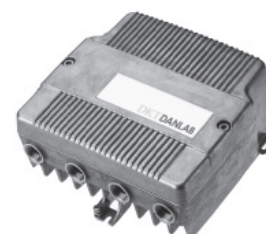




optical node

Highlights

- A wide gain range obtainable by integrated gain switch and attenuators
- Modular optical return path transmitters
- Output Splitter incorporated within the node
- Optional DIB™ module with ingress blocking filter, decreases noise ingress and improves signal quality



Product overview

One future-proof platform. Multiple hot pluggable optional modules. Supporting open industry standards, the compact and modular design of the AO 801 platform provides an upgradeable, scalable and efficient way to manage and control the roll-out of projects and new services on HFC networks. Simple installation, customisation, configuration and system management are the corner stones of the platform design.

Applications

The AO 801V1 addresses the expanding service and operational needs of cable operators planning for the challenge of delivering interactive services to a growing number of subscribers. Ideal for delivering capacity for multimedia applications, the node can be set to the high gain switch position; pushing fiber deeper into the network to subscribers in densely populated areas. Transmission to geographically dispersed subscribers is accommodated, by simply setting the node to the low gain switch position. This subsequently enables a number of amplifiers to be configured in small cascades, ensuring that all subscribers can be served. Whilst operating at a low power consumption level, this all in-one active element delivers high output levels for distribution or low level output for trunk deployments in any broadband HFC network environment.

Key features

- Upgradeable with an HMS compatible network management transponder module
- Upgradeable with a DIB™ (Dynamic Ingress Blocking) Module
- Tri-state switch for return path
- Variety of optional optical return path transmitters
- Flexible return path by plug-in diplexer module
- High input sensitivity and wide input power range
- Excellent surge and transient protection
- 10A external AC input terminal and 5A AC feed through to output terminals

DKT A/S
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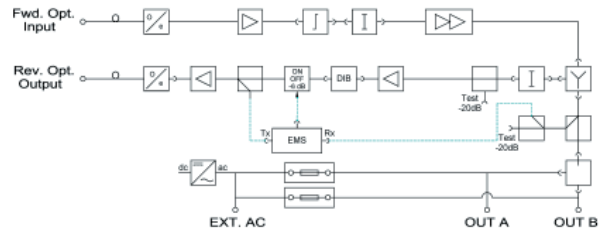
Tlf +45 4646 2626
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technical specifications

Accessories

Please refer to separate datasheets / pricelist

- Transmitter Module: MRT xxx
- Diplexer Filter Modules: MDA xxxx
- Splitter Modules: MS xxx
- Link Module: ML xx
- Pads: JXP-OT2xx
- DIB™ Module: MDIB xxx



Please note that the AO 801V1 is supplied with an ML02 Link Module in the Output Splitter socket. Minimum configuration requires 1 x Diplexer Filter Module, 3 x Pads and 1 x Transmitter Module.

Technical specifications	Unit	AO 801V1
Forward path, Optical part		
Optical wavelength	nm	1290 - 1600
Optical input power level	dBm	-6 to +2
Equivalent current noise - 47 / 862 MHz	pA/√Hz	8 / 6
Forward path, Coaxial part		
Bandwidth (depending on diplexer modules)	MHz	47 - 862
Gain switch (high / low)	dB	0 / -10
Interstage attenuation (depending on pads)	dB	0 - 8
Interstage tilt (depending on pads)	dB	0 - 8
Linearity	dB	± 1
Output level - high gain (optical link specification)	dBuV	102 - 112
CTB (42 ch CENELEC) @ 110dBuV flat / 0dBm / 4.5% OMI	dB	62
CSO (42 ch CENELEC) @ 110dBuV flat / 0dBm / 4.5% OMI	dB	65
Output level - low gain (optical link specification)	dBuV	90 - 106
CTB (42 ch CENELEC) @ 100dBuV flat / 0dBm / 4.5% OMI	dB	68 (transmitter spec.)
CSO (42 ch CENELEC) @ 100dBuV flat / 0dBm / 4.5% OMI	dB	65 (transmitter spec.)
Return loss, @ 40MHz	dB	18 - 1.5 / oct
Return path, bandwidth (depending on diplexer modules)	MHz	5 - 65

Other specifications will depend on the selected transmitter module

General	Unit	
Line power, Voltage	VAC	24 - 65
Line power, Current	mA	1080 - 450
Mains power, Voltage	VAC	175 - 260
Power consumption (incl. return path)	W	19
Water and dust protection		IP65 degree
Internally used optical connector		SC/APC
Coaxial outputs		PG11

Physical Characteristics	Unit	
Dimensions	mm	200x180x82
Weight	kg	2

Line powered - type/order no.	AOL 801V1SC/APC / 65853	AOL 801V1E2000 / 65806
Mains powered - type/order no.	AOM 801V1SC/APC / 65856	AOM 801V1E2000 / 65854

Note: All specifications are with 0 dB link modules. If other modules are inserted, please correct for insertion loss.