

Node+Zero™ Universal Micronode Solution

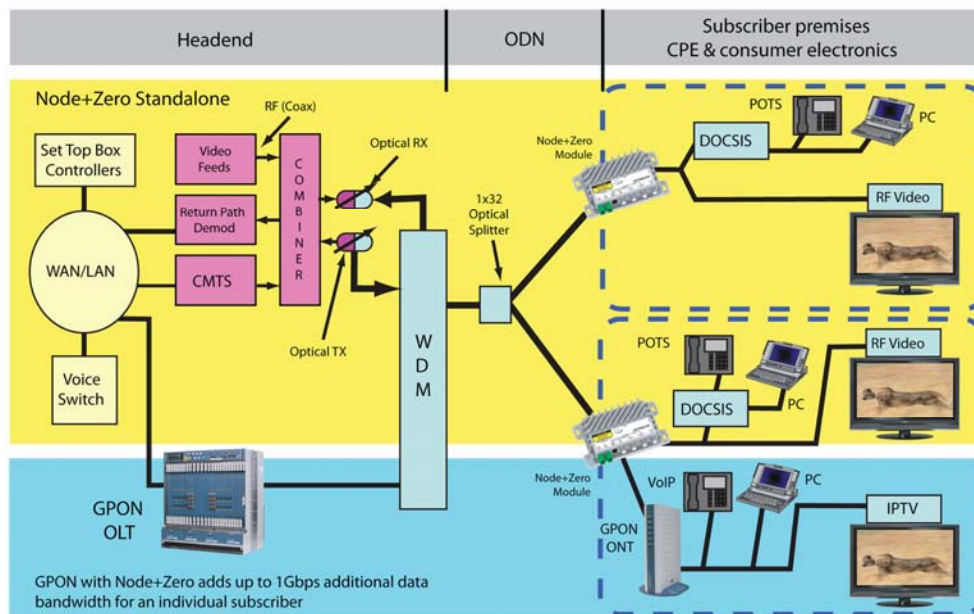
Designed as a universal fiber-to-the-premises solution for HFC (Hybrid Fiber Coax) network operators, the Hitachi Node+Zero micronode provides a fiber optic connection from the head end to the subscriber, reducing costly active components in the network. The Node+Zero micronode follows the specifications of the emerging RFOG (RF Over Glass) initiative, allowing CATV operators to leverage existing head end equipment and to migrate to Passive Optical Network (PON) technology as market conditions warrant. The solution supports targeted bandwidth increases along with opportunities for immediate revenue from subscribers in the target locations.

Node+Zero modules can be deployed as standalone network interface devices at the subscribers' premises, or in combination with a PON ONT to provide increased bandwidth, IPTV, data and POTS voice services, as well as services for businesses. The following table and diagram summarize the models and deployment configurations.



Node+Zero Models

Model	Deployment configuration	Wavelengths TX (nm)	Wavelengths RX (nm)	Wavelengths Pass-Thru (CWDM)	Single Fiber	Migration to PON
H-112	Standalone, with PON, future migration to PON	1590 or 1610	1550	1310/1490	Yes	Yes
H-110	Standalone	1310, 1590 or 1610	1550	No	Yes	No
H-103	With PON	1590 or 1610	No	1310/1490/1550	Yes	Yes





Ordering Information

Node+Zero part numbers are constructed from available options as follows:

Model	FWD/RTRN diplexer	RTRN TX	RF output level
H112	A B	1310	20 0
H110		1590	
H103		1610	

Example: H112-A-1590-20

Definitions

Item	Options	Description
Model	H112	H-112; standalone, with PON, or future migration to PON
	H110	H-110; standalone, no migration to PON
	H103	H-103; deployment with PON
FWD/RTRN Diplexer	A	5-42 MHz return path, 54-1000 MHz forward path
	B	5-65 MHz return path, 85-1000 MHz forward path
RTRN TX	1310 nm	Select one TX wavelength based on network design; 1310 nm available only on Model H-110.
	1590 nm	
	1610 nm	
RF output level	20 dBmV	Typical single subscriber application, Models H-110, H-112
	0	Model H-103 only: no 1550nm RCVR, no fwd path RF TX

Power Options

Universal supply 95-265Vac to 12V > 500mA molded 2.1 mm DC connector	PSU-12DC-MM
110Vac 12V > 500mA with integrated F-type connector for coaxial cable power feed	PSU-12DC-Ftype
Inserter, DC to RF 2 way power combiner	DC-RF-C

Not all features are available simultaneously, and some features may be included in future product releases. Specifications are subject to change without notice. Product information is provided for general guidance only, and does not constitute a warranty. AMN is a trademark of Hitachi Communication Technologies, Ltd. Other product names are trademarks of their respective owners.