

ARRIS CHP-MWV1

1 GHZ MULTIWAVELENGTH FORWARD PATH TRANSMITTERS

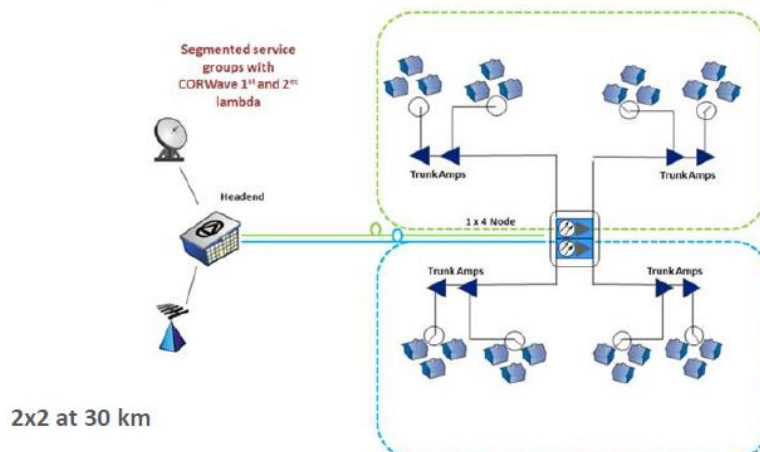
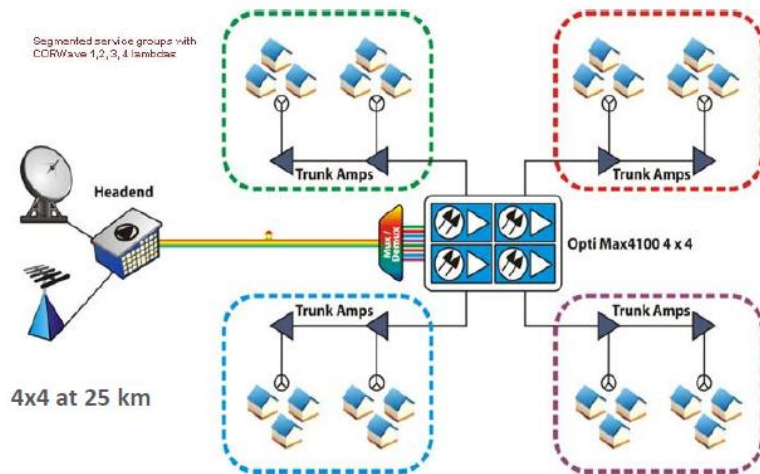


CORWave 1 GHz multiwavelength forward transmitters are an integral part of the CORWave multiwavelength plan, which operators can follow in the 1291nm region to multiplex 4 analog forward, 4 reverse, and 4 GbE-based data services wavelengths over as little as one fiber. The plan supports fiber distances of up to 30 km, forward and return nodesegmentation, and dedicated business service links in in an operator's existing HFC plant.

- Maximize fiber assets with up to 4 O-Band wavelengths for costeffective upgrades
- Optimize headend and hub efficiencies with industry leading density and low power consumption
- Options include fixed output power or variable output powers in five 2 dB-wide ranges to help with sparing
- Front or Rear fiber connections
- Configure, monitor, and manage with CORView™ Element Management System

APPLICATIONS

The following diagrams depict typical applications for combining two or four CORWave wavelengths in the forward path:



SPECIFICATIONS

OPTICAL	
Optical Wavelength	MWV1-1291, MWV2-1293, MWV3-1295, MWV4-1290
Optical Output Power	2-4, 4-6, 6-8, 8-10, 10-12 dBm (2 dB increments)
RF	
Bandwidth	
Operational Range	54 to 1006 MHz
Analog Channel Range	54 to 550 MHz
Digital Channel Range	550 to 1006 MHz
Response Flatness, P-V, typ./max.	1.0/2.0 dB 1.0/2.0 dB
Input to Return Loss	16 dB
Port-to-Port Isolation	≥60 dB, 54 to 800 MHz ≥54 dB, 800 to 870 MHz ≥50 dB, 870 to 1006 MHz
Port-to-Port Gain Variation	±0.5 dB/±1.0 dB
POWERING	
Power Consumption, max.	17.4 W
PERFORMANCE	
Channel Plan	79 NTSC channels and up to 75 256-QAM channels
Input RF Power	
Analog Channels ^{1, 2}	15.0 dBmV/ch
Digital QAM Channels	9.0 dBmV/ch
Composite Second Order, typ. ^{1, 3}	-63 dBc
Composite Triple Beat, typ. ¹	-70 dBc
MECHANICAL	
Optical Connector	SC/APC
RF Connector	F-type
RF Input Test Point ⁴	-20 ±1.0 dB
Dimensions (W x H x D) in (cm) ⁵	1.25 x 3.4 x 18.5 (3.2 x 8.7 x 47.0)
Weight	2.75 lbs (1.24 kg)
ENVIRONMENTAL	
Operational Temperature ⁶	32 to 122°F (0 to 50°C)
Storage Temperature	-40 to 158°F (-40 to 70°C)
Humidity, noncondensing, max.	85%

Notes:

- Distortions are measured using only CW analog carriers per SCTE recommendation by standard RF test methods. Performance shown represents typical performance for production units tested over typical Corning SMF-28 fiber (or equivalent). For minimum CSO and CTB, subtract 2dB from typical. CSO performance is for the transmitter only. CSO specifications for CORWave transmitter is obtained over specified fiber links. The typical system CSO is -60 dBc assuming an 11 dBm launch per wavelength for a four-wavelength system.
- OMI is 3.9% at 79 NTSC channel loading.
- CSO performance for NTSC channels is for the in-band (high-side) beats.
- Relative to main port with 0 dB pad and 0 dB EQ.
- Includes handles and connectors.
- Measured at module's air inlet.