



# CHP Max5000® CORWave™ II 1RU Multi Wavelength Forward Transmitter Technical Specification

## Implementation Requirements for One Fiber Multi Wavelength Applications

### Unique Requirements

Recommended wavelengths <sup>1</sup>	MWE1-D01, MWE2-D02, MWE3-D03, MWE4-D04, ... MWE4-D16 MW01-D01, MW02-D02, MW03-D03, MW04-D04, ... MW0G-D16
Maximum launch power/wavelength	13 dBm (single wavelength), 13 dBm (4 wavelengths), 10 dBm (8 wavelengths)
SBS Suppression	13 dBm

### Common Requirements

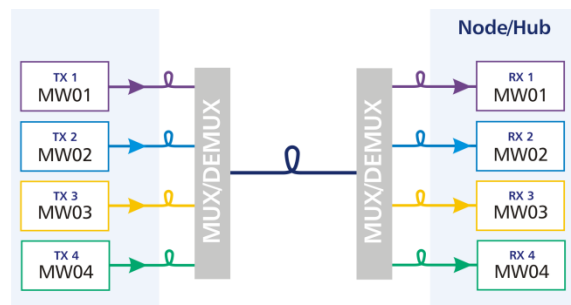
Analog content	Must use common analog content
Digital content	Must use common digital content below 250 MHz
Analog RF input level	15 dBmV/channel <sup>2</sup>
Digital RF input level	9 dBmV/channel

### Notes

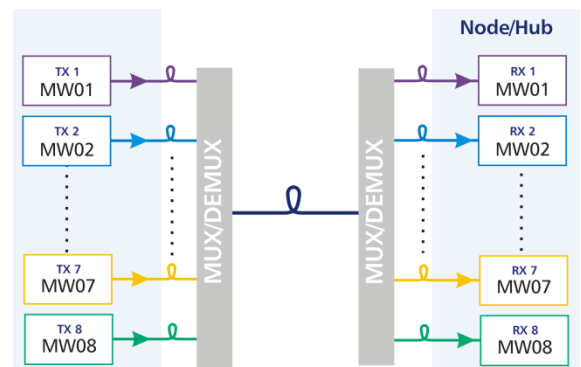
- ARRIS recommends MW01-D01 as the first wavelength.
- For 77 analog carriers with 450 MHz of digital @ -6dB; contact ARRIS representative for different channel line-ups

## Applications

The following diagrams depict the typical application for combining four or eight CORWave II wavelengths in forward paths that are multiplexed onto a single fiber with a maximum launch power of 13 or 10 dBm per wavelength, up to four or eight. This facilitates immediate forward path segmentation and reduces the node service group size. Follow the implementation requirements listed in the table on the next page to ensure a successful implementation. Contact ARRIS for implementation details and solutions for other applications.



**1 x 4 – 65 km**  
(77 analog carriers with 450 MHz digital)



**1 x 8 – 40 km**  
(77 analog carriers with 450 MHz digital)

# CHP Max5000® CORWave™ II 1RU Multi Wavelength Forward Transmitter

## General Specifications

### Optical

Wavelength	1525 to 1565 nm, 16 optimized wavelengths
Output Power	8.5 dBm
Link	Up to 65km <sup>1</sup>

### RF

Operating Bandwidth	54 to 1002 MHz
Channel Loading	54 to 550 MHz analog channels, 450 MHz, 256 QAM channels (6 dB below analog)
Input RF Power:	15 dBmV for 77 analog carriers with 450 MHz of digital @ -6dB
RF Input Impedance:	75Ω
Flatness	±1.0 dB
Testpoint	-20 ± 1.0 dB

### Typical Link Performance

CNR	49 dB <sup>2-3</sup>
CSO	-60 dBc <sup>2-3</sup>
CTB	-60 dBc <sup>2-3</sup>
MER	38 dB

### Electrical/Environmental/Mechanical

Power Consumption	37W typical
Optical Connector	SC/APC
RF Connector	F-type
Control Interface	SNMP Ethernet
Dimensions, in (cm) W x H x D	18.98 x 1.75 x 14.75 (48.2 x 4.45 x 37.5)
Weight, lbs (kg)	5.0 (2.27)
Temperature, C (F), Operational	0 to 50 (32 – 122)
Temperature, C (F), Storage	-20 to 60 (-4 to 140)
Humidity	85%, noncondensing, max.

#### Notes:

1. Typical CORWave II operational ranges are 4 to 16 wavelengths, up to 65km.
2. Link performance based on 8 wavelengths over 40km with one EDFA and optical passive at the receiver, 77 NTSC channels measured according to standard procedures.
3. CNR and CSO/CTB may degrade up to 0.5 and 2.0 dB, respectively, over full operating temperature range and overall polarization states.

## Ordering Information

To configure a product that meets your specific needs, or for any questions, please contact your ARRIS Sales Professional. You may also use our Product Wizard, located at [support.arrisi.com](http://support.arrisi.com) (User ID and password required). If you do not have a user ID and password or have forgotten your password, please use the Sign In Help section indicated.

Specifications are subject to change without notice.

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