

## Model Numbers

Listed below are the model options for the OM3100 node. For ordering information, please use our real-time Product Configurator Wizard located on the ARRIS website.

OM31	Opti Max3100 series
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G	1 GHz with 53.5dBmV output level
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J	42/54MHz
Q	55/70MHz
H	65/85MHz
R	85/105MHz

6	Standard output (GaAs) RF module without return switches
7	Standard output (GaAs) RF module with return switches
8	High output (GaN) RF module without return switches
9	High output (GaN) RF module with return switches

C	9.5dB (8dB @ 54-870 MHz)
D	11.5dB (10dB @ 54-870MHz)
E	12.5dB (11dB @ 54-870MHz)
F	14.5dB (12.5dB @ 54-870MHz)
G	16.5dB (14.5dB @ 54-870MHz)

1	1 x 4 forward using 1 x 4 RF module
2	2 x 2 forward using 2 x 2 RF module
3	1 x 4 forward using 2 x 2 RF module
5	1 x 3 forward (only available as lid/RF module upgrade)
6	2 x 2 RF module - (only available as lid/RF module upgrade)

B	Strand-mount with fiber tray
C	Strand-mount with bracket
D	Pedestal-mount with bracket
E	Pedestal-mount with fiber tray
F	Pedestal-mount with bracket
G	Pedestal-mount with fiber tray
H	Optical Lid Upgrade w/RF module and Fiber Tray
J	Optical Lid Upgrade w/RF module and Fiber Bracket
K	Optical Lid Upgrade w/RF module and Fiber Tray
L	Optical Lid Upgrade w/RF module and Fiber Bracket

0	None
1	3 x 1 or 4 x 1 return (no segmentation)
2	2 x 2 top/bottom return segmentation
3	2 x 2 left/right return segmentation

A	One Standard Gain Receiver
B	Two Standard Gain Receivers with optical redundancy
C	Two Standard Gain Receivers with 2 x 2 forward segmentation
J	One High Gain Receiver
K	Two High Gain Receivers with Optical Redundancy
L	Two High Gain Receivers with 2 x 2 Forward Segmentation

1 - 4	1 = FC/APC, 2 = SC/APC, 3 = FC/UPC, 4 = SC/UPC
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A	Jacketed fiber (bracket)
B	Buffered fiber (tray)

0	None
A	Single analog NRT
B	Dual analog NRTs for optical redundancy
C	Dual analog NRTs for 2 x 2 segmentation
J	42MHz Single 2:1 Mux Digital Processing module (OM3DTX-SFP-242-5Ax where x=1 or 5) with SFP for 2 x 2 segmentation (1 SFP and 1 connectorized fiber interface cable required). SFP (CWDM and 1310nm DFB - 10km) may be pre-installed or SFP and fiber interface cable ordered separately. Not one way EMS ready.
K	42MHz Single 2:1 Mux Digital Processing module (OM3DTX-SFP-242-5A6) with SFP for 2 x 2 segmentation (1 SFP and 1 connectorized fiber interface cable required). SFP (CWDM and 1310nm DFB - 10km) may be pre-installed or SFP and fiber interface cable ordered separately. One way EMS ready.
P	65MHz Single 2:1 Mux Digital Processing module (OM3DTX-SFP-265-5A6) with SFP for 2 x 2 segmentation (1 SFP and 1 connectorized fiber interface cable required). SFP (CWDM and 1310nm DFB - 10km) may be pre-installed or SFP and fiber interface cable ordered separately. One way EMS ready.
G	85MHz Single 1:1 Mux Digital Processing module (OM3DTX-SFP-185-5A6) with SFP for 4 x 1 segmentation (1 SFP and 1 connectorized fiber interface cable required). SFP (CWDM and 1310nm DFB - 10km) may be pre-installed or SFP and fiber interface cable ordered separately. Not one way EMS ready.
H	85MHz Dual 1:1 Mux Digital Processing module (OM3DTX-SFP-185-5A6) with SFP for 4 x 1 segmentation with redundancy (1 SFP and 1 connectorized fiber interface cable required). SFP (CWDM and 1310nm DFB - 10km) may be pre-installed or SFP and fiber interface cable ordered separately. Not one way EMS ready.
M	85MHz Dual 1:1 Mux Digital Processing module (OM3DTX-SFP-185-5A6) with SFP for 2 x 2 segmentation (2 SFPs and 2 connectorized fiber interface cables required). SFP (CWDM and 1310nm DFB - 10km) may be pre-installed or SFP and fiber interface cable ordered separately. Not one way EMS ready.

00	None
0y	One NRT
xy	Two NRTs (list primary Tx first)

	Analog CWDM TX: A=1611 nm, B=1591 nm, C=1571 nm, D=1551 nm, E=1531 nm, F=1511 nm, G=1491 nm, H=1471 nm
	Analog DFB TX: J=1310nm, K=1550nm
	Digital processing module CWDM wavelength depends on SFP installed: A=1611 nm, B=1591 nm, C=1571 nm, D=1551 nm, E=1531 nm, F=1511 nm, G=1491 nm, H=1471 nm, L=1451 nm, M=1431 nm, N=1411 nm, P=1391 nm, Q=1371 nm, R=1351 nm, S=1331 nm, T=1311 nm, U=1291 nm, V=1271 nm (40km)
	Z=1310nm DFB (10km)
	DWDM SFPs (120km) must be ordered separately

0	None
1	FC/APC
2	SC/APC
3	FC/UPC
4	SC/UPC

0	No transponder (Value Max compatible)
B	Value Max, AM protocol
C	Value Max, HMS protocol
Z	No transponder but daughter card ready

0	Standard Finish (Corrosion Protection)
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The OM3100 node options are for reference only and should not be used for ordering. Contact your ARRIS sales professional for ordering information. You may also use our Product Wizard Configurator located on the ARRIS website.

## Forward Path Configurations

The OM3100 node has a forward passband up to 1002 MHz (with 42/54, 55/70, 65/85, 85/105 MHz splits). In the forward path, the OM3100 accepts optical signals via one or two forward network optical receivers (NORs). The Opti Max3100 NORs convert optical signals to RF signals and provide RF amplification. These amplified signals are then routed to the RF module, where—depending on the forward segmentation configuration—they are further amplified and distributed to other portions of the HFC (hybrid fiber/coax) network.

The OM3100 node is available in the following forward configurations:

- 1 x 4 forward using 1 x 4 RF module without transponder
- 1 x 4 forward using 1 x 4 RF module with transponder
- 1 x 4 forward redundant using 1 x 4 RF module with transponder
- 1 x 4 forward using 2 x 2 RF module without transponder
- 1 x 4 forward using 2 x 2 RF module with transponder
- 1 x 4 forward redundant using 2 x 2 RF module with transponder
- 2 x 2 forward segmentation without transponder
- 2 x 2 forward segmentation with transponder
- 1 x 3 forward using 1 x 3 RF module without transponder (upgrade only)
- 1 x 3 forward using 1 x 3 RF module with transponder (upgrade only)
- 1 x 3 forward redundant using 1 x 3 RF module with transponder (upgrade only)
- 2 x 2 RF module with port 1 RF terminated; passes AC — forward and return (upgrade only)

In addition to the above Opti Max3100 nodes, an optical lid upgrade pre configured to the Opti Max3100 RF module is available that is designed to convert a legacy Philips Diamond Line amplifier with a 9NH housing into an Opti Max3100 node or upgrade a Diamond Net or Opti Max3000 node to an Opti Max3100 node. Since the lid and RF module are pre configured with cables interconnecting these two devices, a cable tie holds the lid and RF module together to ease the installation of the lid and RF module.