



## Supported Amplifiers

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## Supported Amplifiers

Cisco ONP supports the following amplifiers:

**Table 1: Cisco ONP Supported NCS 2000 Amplifiers**

| Amplifier            | Description                                                                                   |
|----------------------|-----------------------------------------------------------------------------------------------|
| 15454-M-RAMAN-CTP    | Raman Amp C-Band                                                                              |
| 15454-M-RAMAN-COP    | Raman Amp C-Band                                                                              |
| EDFA 35 for OLA node | Erbium Doped Fiber Amplifier (EDFA) that can function in dual gain with maximum gain of 35 dB |
| NCS2K-EDRA2-26C      | 21dBm EDFA + Bst 26dB Span - C-Band                                                           |
| NCS2K-EDRA1-26C      | 21dBm EDFA 26dB Span - C-Band                                                                 |
| NCS2K-EDRA2-35C      | 21dBm EDFA + Bst 35dB Span - C-Band                                                           |
| NCS2K-EDRA1-35C      | 21dBm EDFA 35dB Span - C-Band                                                                 |



### Note

- RAMAN-CTP is supported on all nodes.
- EDRA's are supported on the OLA node.
- For ROADM and Traffic nodes, the booster amplifier and preamplifier are in-built. The booster is 20SMR-FS-BST.

Table 2: Cisco ONP Supported NCS 1010 Amplifiers

| Amplifier            | Description           |                          |                                   |
|----------------------|-----------------------|--------------------------|-----------------------------------|
|                      | Lower Range Gain (dB) | Standard Range Gain (dB) | Tilt Uncontrolled Range Gain (dB) |
| <b>C-Band</b>        |                       |                          |                                   |
| OLT-C-Bst            | 16                    | 24                       | 31                                |
| OLT-C-Pre-Normal     | 12                    | 22                       | 25                                |
| OLT-C-Pre-Extended   | 17                    | 32                       | 35                                |
| ILA-C-Normal         | 8                     | 17                       | 20                                |
| ILA-C-Extended       | 13                    | 30                       | 33                                |
| ILA-R-C-Normal       | 8                     | 17                       | 23                                |
| ILA-R-C-Extended     | 13                    | 30                       | 36                                |
| ILA-2R-C-Normal      | 8                     | 17                       | 20                                |
| ILA-2R-C-Extended    | 13                    | 30                       | 33                                |
| E-ILA-R-C-Normal     | 8                     | 17                       | 20                                |
| E-ILA-R-C-Extended   | 13                    | 30                       | 33                                |
| E-ILA-2R-C-Normal    | 8                     | 17                       | 20                                |
| E-ILA-2R-C-Extended  | 13                    | 30                       | 33                                |
| E-ILA-C-R-2-Normal   | 8                     | 17                       | 20                                |
| E-ILA-C-R-2-Extended | 13                    | 30                       | 33                                |
| <b>L-Band</b>        |                       |                          |                                   |
| OLT-L-Bst            | 17.5                  | 25.5                     | 32.5                              |
| OLT-L-Pre-Normal     | 13.3                  | 23.3                     | 26.3                              |
| OLT-L-Pre-Extended   | 18.3                  | 36.3                     | 39.3                              |
| ILA-L-Normal         | 10.8                  | 19.8                     | 22.8                              |
| ILA-L-Extended       | 15.8                  | 32.8                     | 35.8                              |

**Table 3: Cisco ONP Supported NCS 1001 Amplifiers**

| Amplifier                   | Description             |                          |                                               |
|-----------------------------|-------------------------|--------------------------|-----------------------------------------------|
|                             | Pre Amplifier Gain (dB) | Standard Range Gain (dB) | Tilt Uncontrolled<br>Extended Range Gain (dB) |
| NCS1K-EDFA-Bst              |                         | 1-20                     | 20-25                                         |
| NCS1K-EDFA-Pre -<br>Range 1 |                         | 0-24                     | 24-27                                         |
| NCS1K-EDFA-Pre -<br>Range 2 |                         | 20-34                    | 34-27                                         |

**Table 4: Cisco ONP Supported NCS 1014 Amplifiers**

| Amplifier                        | Description     |                          |                                               |
|----------------------------------|-----------------|--------------------------|-----------------------------------------------|
|                                  | Fixed Gain (dB) | Standard Range Gain (dB) | Tilt Uncontrolled<br>Extended Range Gain (dB) |
| NCS1K14-EDFA2-Bst-1<br>- Range 1 | 8               | -                        | -                                             |
| NCS1K14-EDFA2-Bst-1<br>- Range 2 | 20              | -                        | -                                             |
| NCS1K14-EDFA2-Bst-2              | -               | 12-24                    | 24-27                                         |
| NCS1K14-EDFA2-Pre -<br>Range 1   | -               | 0-25                     | 25-28                                         |
| NCS1K14-EDFA2-Pre -<br>Range 2   | -               | 20-26                    | 36-29                                         |

