



## CableServ Return Transmitter for Scientific Atlanta® 694\* Series Optical Nodes

### Product Description

CableServ® offers a series of Return Path transmitter modules for Scientific Atlanta 694\* and GainMaker® Optical Nodes.

The Return Transmitters are offered in DFB 1310nm and 1550nm, as well as 1470 to 1610nm ITU CWDM wavelengths.

### Applications

- Replacement Return TX Modules.
- Upgrade of Fabry-Perot to DFB return transmitters for launch of Telephony.
- CWDM Modules for multiplexing upstream data on a single fiber.



These high performance return transmitters perform equal to or better than the original manufacturer's products. For Cable Operators launching Telephony, CableServ offers DFB return transmitters that directly replace the original low performance Fabry-Perot devices, offering increased performance.

In traditional data transmission, the overloading of a return transmitter can result in laser clipping and lost data packets forcing a request to re-transmit data. With Digital Telephone Services laser clipping and the resulting lost data packets may result in dropped telephone calls. For this reason many CATV operators are upgrading to better performing DFB return transmitters.

CableServ also offers CWDM (Coarse Wavelength Division Multiplexing) Technology Return Modules. These are an ideal solution when there is no additional fiber at the node, yet the node is required to be segmented. CWDM allows the combining of multiple return paths. The individual node segments are modulated on to individual return lasers and multiplexed onto a single fiber.

### Product Features

**RF Test Point**

**DC Test Point scaled to Transmit Power**

**Plug-in Attenuator**

**LED Indicators for DC Power and Transmit Power**

**Low Power Consumption**

**Standard (6940, Gainmaker) and High Gain (6940/42 CWDM and Segmentation, 6944)**

**Versions**

**Two Year CableServ Warranty**

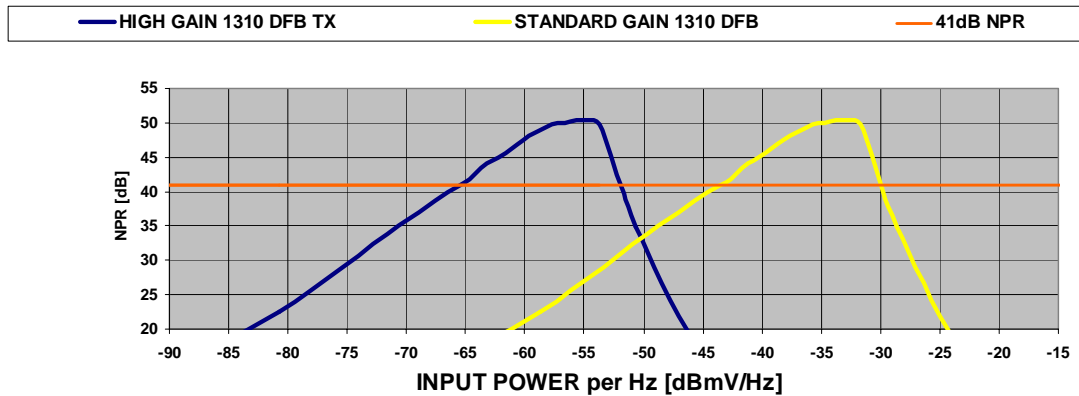
## SA 694\* NODE REVERSE TRANSMITTER

| PARAMETER                          | Notes | Units  |              |
|------------------------------------|-------|--------|--------------|
| Technology                         |       |        | DFB Uncooled |
| Wavelength                         |       | nm     | 1310         |
| Wavelength: WDM Models             |       | nm     | 1550         |
| Wavelength: CWDM Models (ITU Grid) |       | nm     | 1470-1610    |
| Passband                           |       | MHz    | 5-200        |
| Frequency Response                 |       | +/- dB | 0.5          |
| Input return Loss                  |       | dB     | -16          |
| Optical Output Power               |       | mW     | 2            |
| Optical Test Point                 |       | VDC    | 1V/mW        |
| RF Test Point                      |       | dB     | -20 +/-0.5   |
| Return Path NPR @ 41 dB C/(N+IM)   | 1     | dB     | see plot     |
| Optical Connector                  | 2     |        | SC/APC       |

**NOTES:**

1. Typical NPR with 10dB Optical Link (21km Fiber and 3dB Passive loss)
2. Other connector types available on special order.

### STANDARD AND HIGH GAIN 694\*LASER NPR



| PRODUCT NAME                | ORDER NUMBER    |
|-----------------------------|-----------------|
| CS RTX SA 694X 1310 DFB SG  | 824-308-250-OCE |
| CS RTX SA 694X 1310 DFB HG  | 824-308-252-OCE |
| CS RTX SA 694X 1550 DFB SG  | 824-308-254-OCE |
| CS RTX SA 694X 1550 DFB HG  | 824-308-256-OCE |
| CS RTX SA 694X 1470 CWDM HG | 824-308-261-OCE |
| CS RTX SA 694X 1490 CWDM HG | 824-308-262-OCE |
| CS RTX SA 694X 1510 CWDM HG | 824-308-263-OCE |
| CS RTX SA 694X 1530 CWDM SG | 824-308-264-OCE |
| CS RTX SA 694X 1530 CWDM HG | 824-308-265-OCE |
| CS RTX SA 694X 1550 CWDM SG | 824-308-266-OCE |
| CS RTX SA 694X 1550 CWDM HG | 824-308-267-OCE |
| CS RTX SA 694X 1570 CWDM HG | 824-308-268-OCE |
| CS RTX SA 694X 1590 CWDM HG | 824-308-269-OCE |
| CS RTX SA 694X 1610 CWDM HG | 824-308-270-OCE |



**CableServ Inc.**  
 949 Kamatom Rd  
 Mississauga, Ontario, Canada L4W 2R5  
 Telephone: (905) 629-1111  
 Fax: (905) 629-1115  
 E-mail to: [inquiries@cableserv.com](mailto:inquiries@cableserv.com)  
 Visit us at [www.cableserv.com](http://www.cableserv.com)