HFC Enhance® LN-SM71 NODE DFB RETURN PATH TRANSMITTER

D3.1/CCAP™ Compliant

1. Overview

Figure #1 illustrates the HELNxxxx DFB-based Return Path Transmitter.

Figure #1

2. Installation

1. Power off the LN-SM71 Node.
2. Open the LN-SM71 Node, locate the existing Return Transmitter Module, remove it and replace it with the new module provided. Figure #2 shows the location of the Return Transmitter Module in the LN-SM71 Node.
3. Reconnect the FIBER and COAX cables of the transmitter.
4. Power the LN-SM71 Node back on.
5. When everything is connected and the unit is powered, adjust the level of the transmitter for optimum RF drive level (see Section #3).
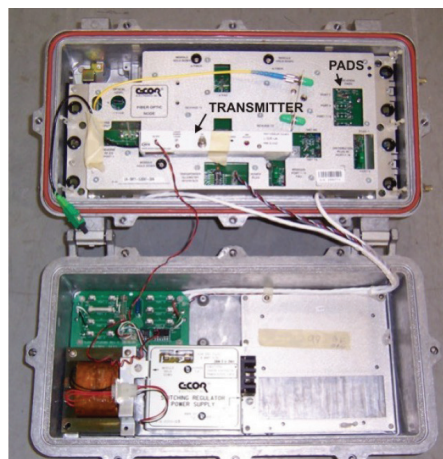

Figure #2

3. Setting Laser Drive Levels

The HFC Enhance Return Path DFB Transmitters for the LN-SM71 Nodes have been optimized based on the assumption that they will be driven with 37 MHz of loading. The optimum drive level (using 6 carriers) at the test point on the transmitter module is +5 dBmV[1] per carrier. (**NOTE** – this translates to an input drive level to the transmitter of +2 dBmV).

To adjust the driver level for the transmitter, adjust the padding or the OMI pot on the return path transmitter.

[1] The optimum operating point for the transmitter is selected as the point that is 5 dB above the location where the noise side of the NPR curve crosses 41 dB. The NPR curve is generated using 37 MHz of noise loading and the per carrier power level is calculated assuming that the total power is calculated at the optimum operating point is spread across 6 carriers. Hence, +5 dBmV for the HELNxxxx assumes a total of 6 carriers of loading.Service & Support

Service & Support

Contact ATX Networks

Please contact ATX Technical Support for assistance with any ATX products. Please contact ATX Customer Service to obtain a valid RMA number for any ATX products that require service and are in or out-of-warranty before returning a failed module to the factory.

RF Products
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Warranty Information

All of ATX Networks' products have a 1-year warranty that covers manufacturer's defects or failures.