



SCN-3000 Series (Custom 32 Node Forward & Reverse Network Manager) Overview

SCN-3000

SCN-3000 Series:

Application:

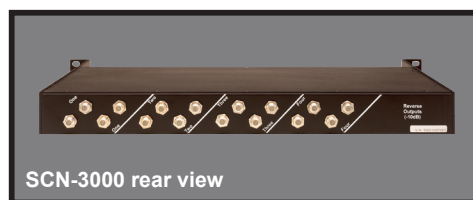
The SCN-3000 Series is a family of 19" x 1.75" rack mount chassis that are custom manufactured by ATX. Each chassis has been designed to perform a variety of splitting and combining functions. When all the chassis are integrated in a rack, all forward and reverse services are managed in a very cost-effective and space-efficient manner. Furthermore, with appropriate RF signal level management in the hub site, the SCN-3000 Series can perform all of its splitting and combining functions without amplifiers.

Features:

- ▶ Simultaneously manages forward and reverse transmissions to and from up to 32 nodes in one 19" rack
- ▶ Handles high speed data, telephony, IPPV, etc.
- ▶ All splitting/combining can be performed without amplifiers
- ▶ Ideally suited for limited headend space
- ▶ Flexible design allows customization to meet individual system requirements

Functionality Description:

The following block diagrams illustrate the functionality of the SCN-3000 Series in a HFC hub site. In this example application a single 19" rack package of the SCN-3000 Series manages forward and reverse transmissions to and from up to 32 nodes. Furthermore, levels of the RF signals that enter, or that are generated within the hub site, are controlled so that the splitting and combining functions performed by the SCN-3000 Series are accomplished without amplifiers. The forward transmission section of this rack consists of the SCN-3000, 3003, and 3004. It provides the capability to distribute Broadcast and Narrowcast services to eight Forward Group laser transmitters, each of which addresses up to four nodes. The reverse section of this rack consists of the SCN-3001 and 3002. It allows for distribution of the reverse transmissions from up to 32 nodes to their appropriate locations such as High Speed Data routers and HDTs. The services provided in this specific example include: Broadcast, System Monitoring, Sweep, High Speed Data, Telephony, and IPPV.

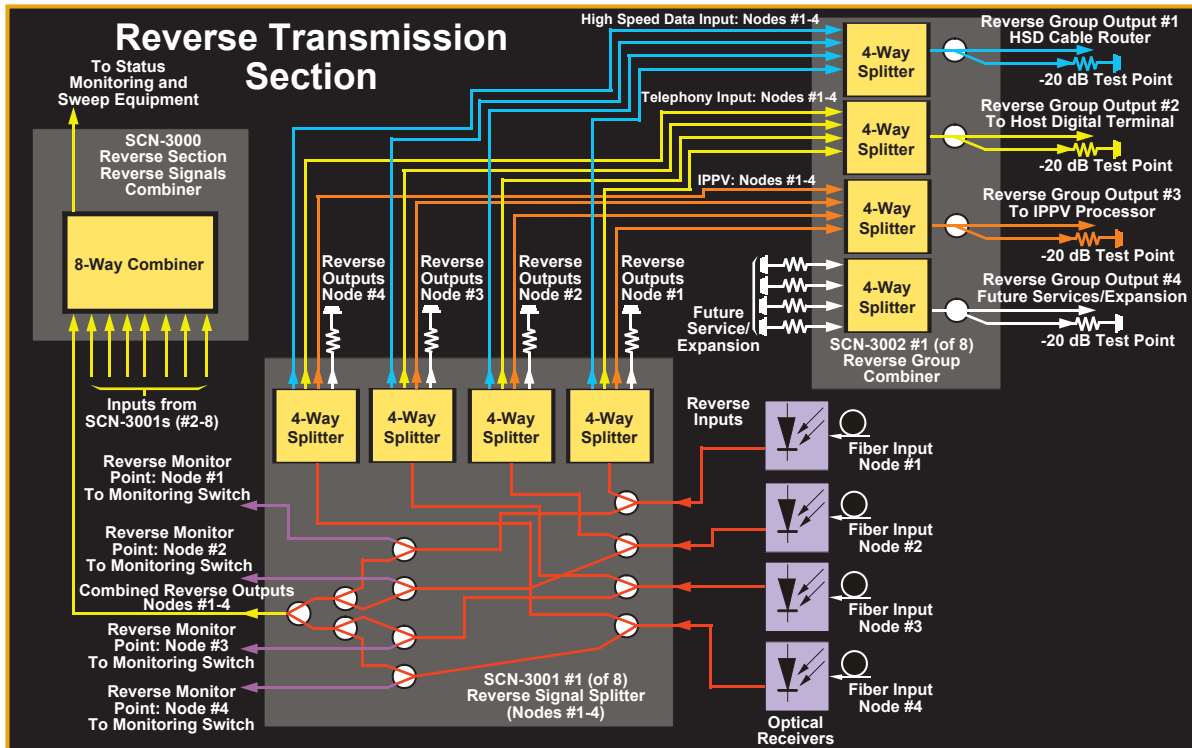
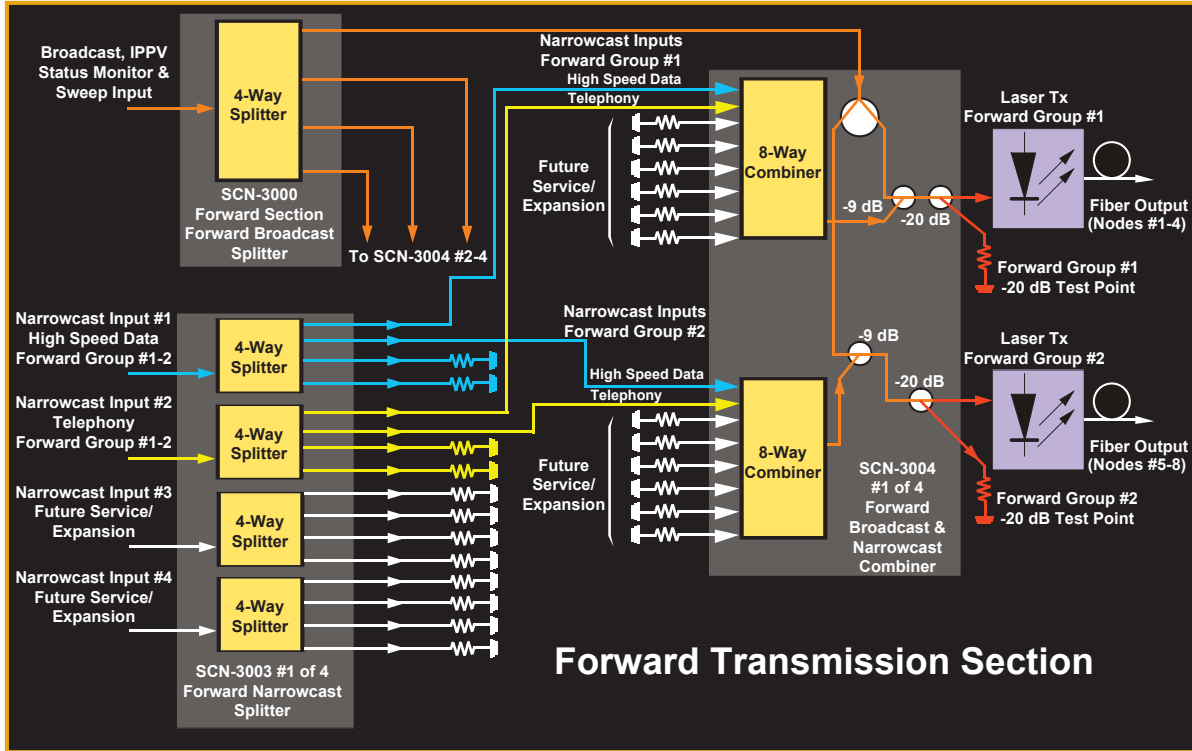


Ordering Information

Part Number	Description
SCN-3000	Forward Broadcast Splitter/Reverse Signal Combiner
SCN-3001	Reverse Signal Splitter
SCN-3002	Reverse Group Combiner
SCN-3003	Forward Narrowcast Splitter
SCN-3004	Forward Broadcast and Narrowcast Combiner
SCN-3005	Return Broadcast Combining Unit

SCN-3000 Series:

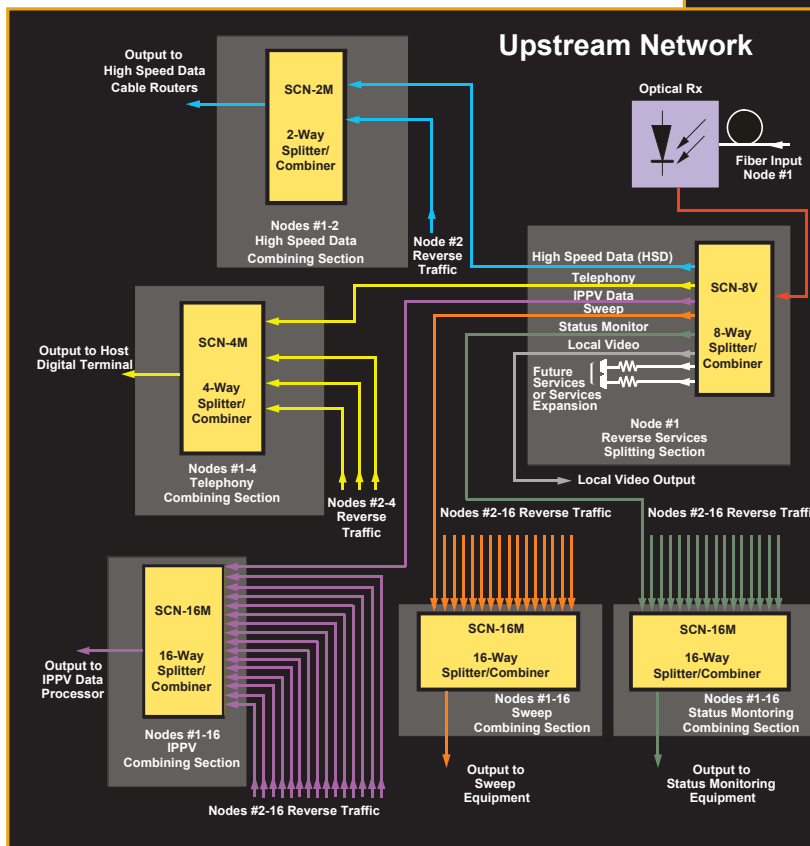
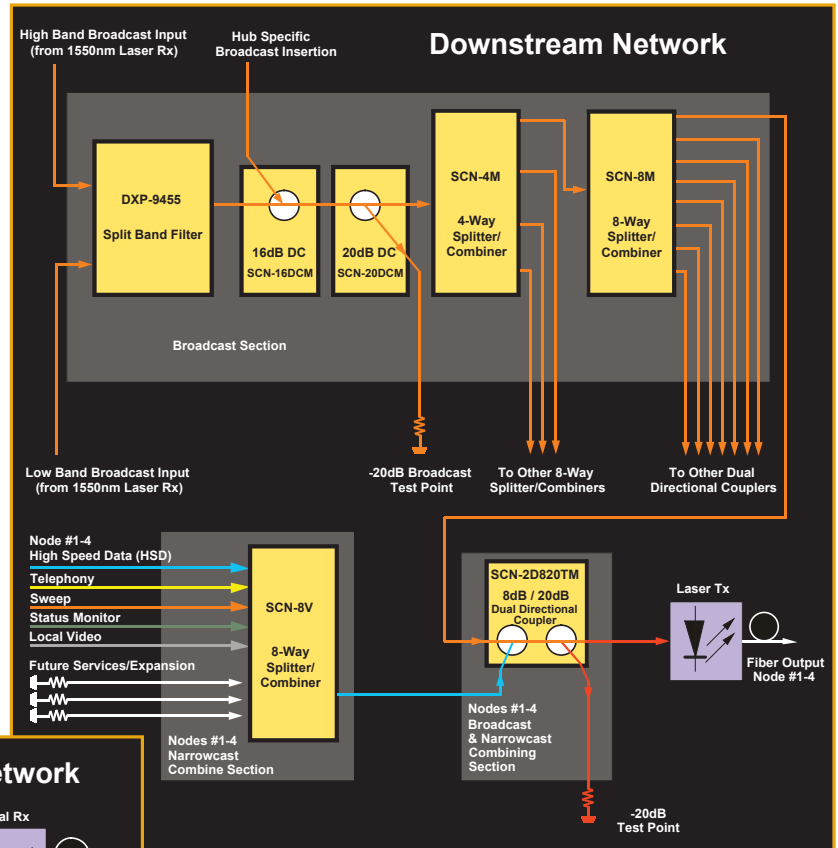
SCN-3000 Series Block Diagrams



Hub Site Application Example:

Downstream Network Description:

The Downstream Network Block Diagram illustrates the downstream section of a hub site in a HFC distribution network using ATX's SCN splitting/combining networks products. As can be seen in this block diagram, broadcast and narrowcast services are acquired from their appropriate sources and then combined into a single downstream signal which drives the laser transmitter. Services implemented in this hub site configuration include: Broadcast (including IPPV), Hub Specific Broadcast, High Speed Data, Telephony, Sweep, Status Monitoring, and Local Video. There is also room in this system for services expansion as node density increases, or for future services being added to the network.



Upstream Network Description:

The Upstream Network Block Diagram illustrates the upstream section of a hub site in a HFC distribution network using ATX's SCN splitting/combining networks products. As seen in the block diagram, the upstream signal from the optical receiver for each node is split so that the upstream services can be routed to their appropriate destinations. Upstream services implemented in this hub site configuration include: High Speed Data, Telephony, IPPV, Sweep, Status Monitoring, and Local Video. There is also room in this system for services expansion as node density increases, or for future services being added to the network.

Specifications subject to change without notice.



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