



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

SCN-3001 & SCN-3004

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 & combining functions. When all the chassis are integrated in a rack, all forward & reverse services are managed in a very cost-effective & space-efficient manner. Furthermore, with appropriate RF signal level management in the hub site, the SCN-3000 Series can perform all of its splitting & combining functions without amplifiers.

Features:

- ▶ Simultaneously manages forward & reverse transmissions to & 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 & reverse transmissions to & 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 & 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, & 3004. It provides the capability to distribute Broadcast & 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 & 3002. It allows for distribution of the reverse transmissions from up to 32 nodes to their appropriate locations such as High Speed Data routers & HDTs. The services provided in this specific example include: Broadcast, System Monitoring, Sweep, High Speed Data, Telephony, & IPPV.

SCN-3000 Series Specifications

SPECIFICATIONS	SCN-3000	SCN-3001	SCN-3002	SCN-3003	SCN-3004	SCN-3005
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F)					
HUMIDITY	5-95% (without condensation)					
DIMENSIONS	1.75"H x 19.0"W x 10.5"D (4.45H x 48.26W x 26.67D cm)					
WEIGHT	5.0 lbs (2.3 kg)	5.73 lbs (2.6 kg)	5.2 lbs (2.36 kg)	5.0 lbs (2.3 kg)	4.6 lbs (2.1 kg)	4.85 lbs (2.2 kg)

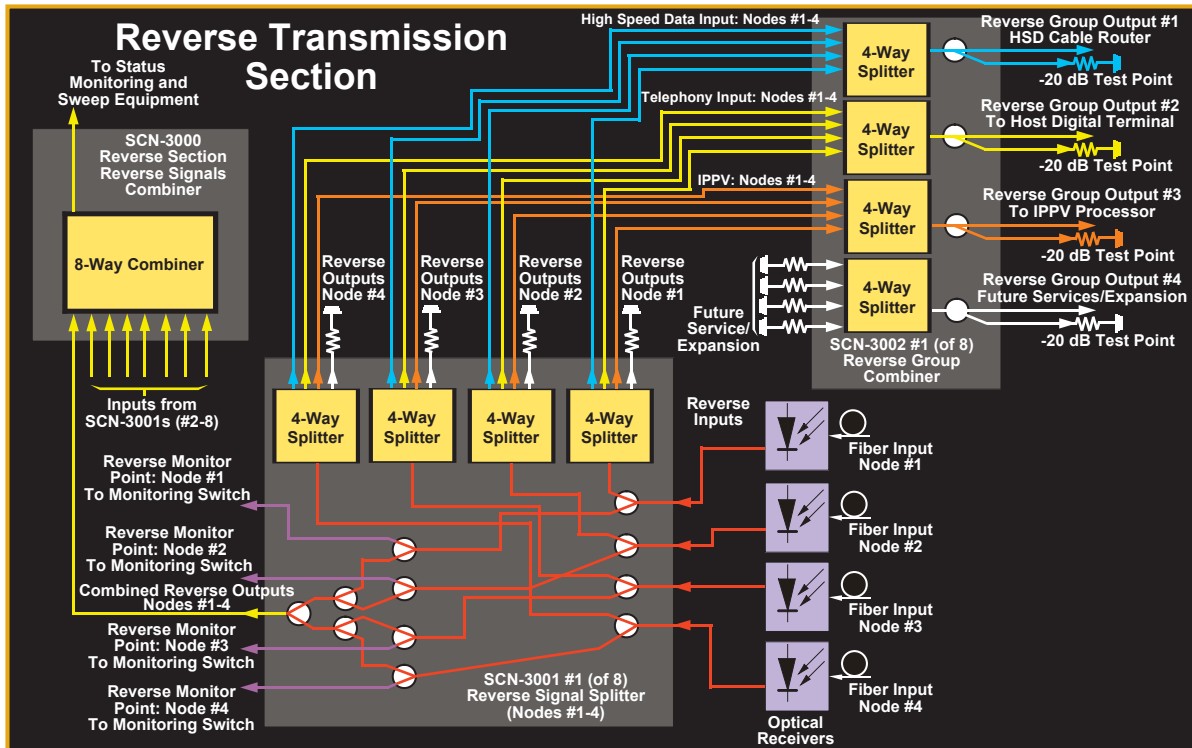
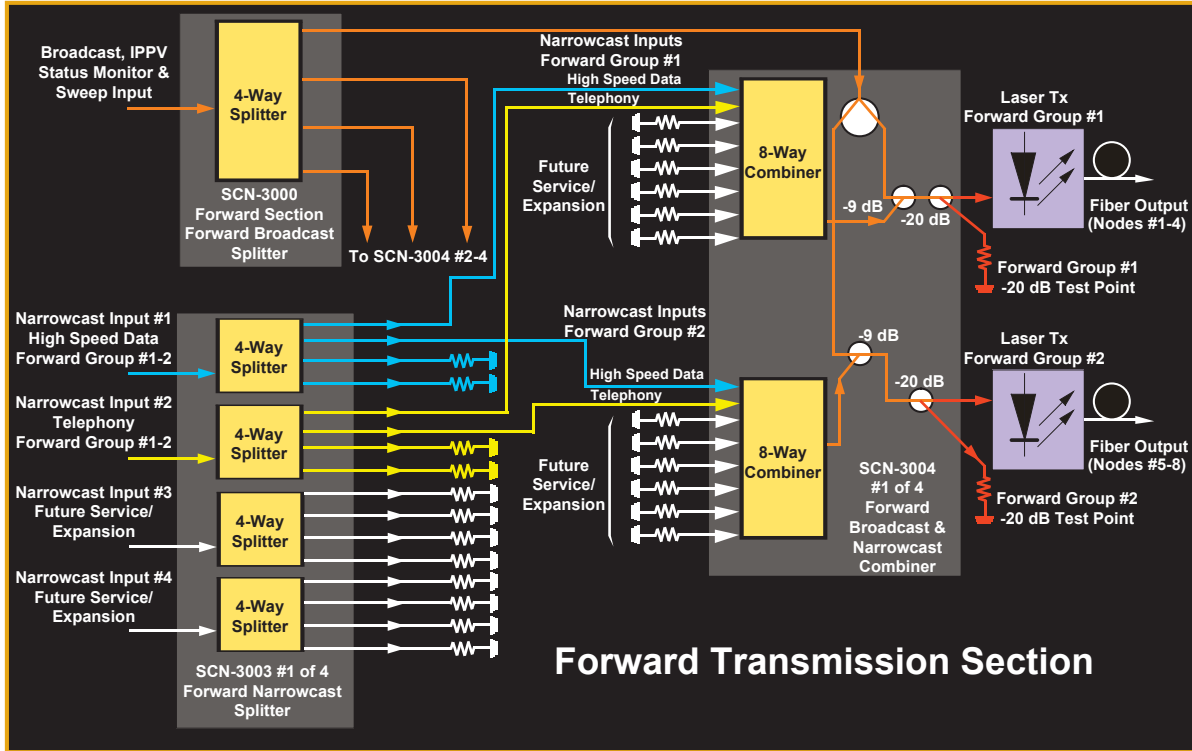
Ordering Information

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 & Narrowcast Combiner
SCN-3005	Return Broadcast Combining Unit



SCN-3000 Series:

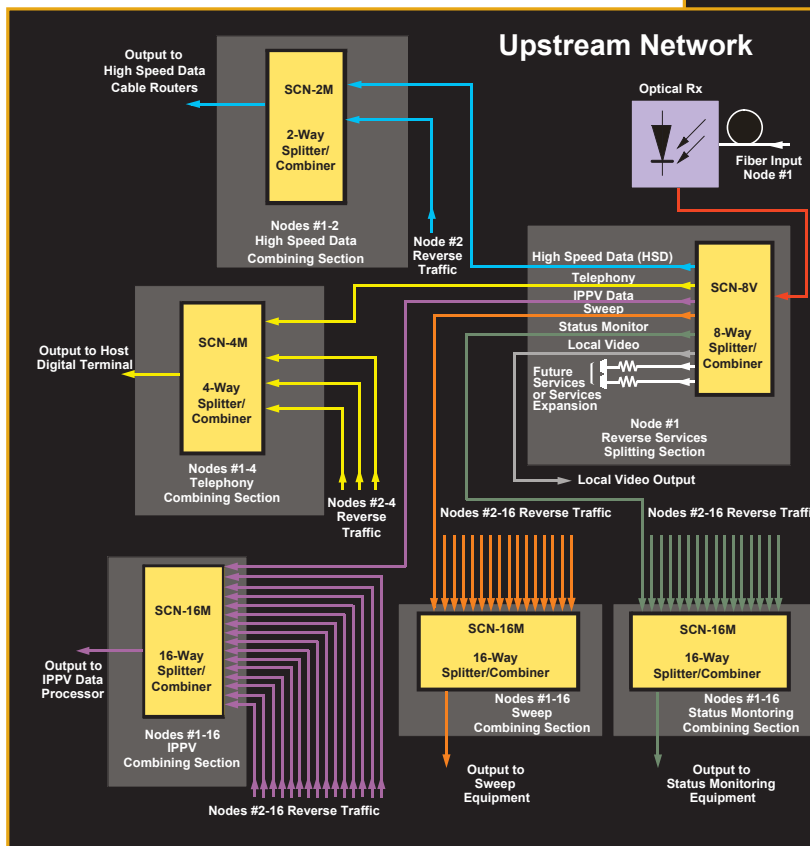
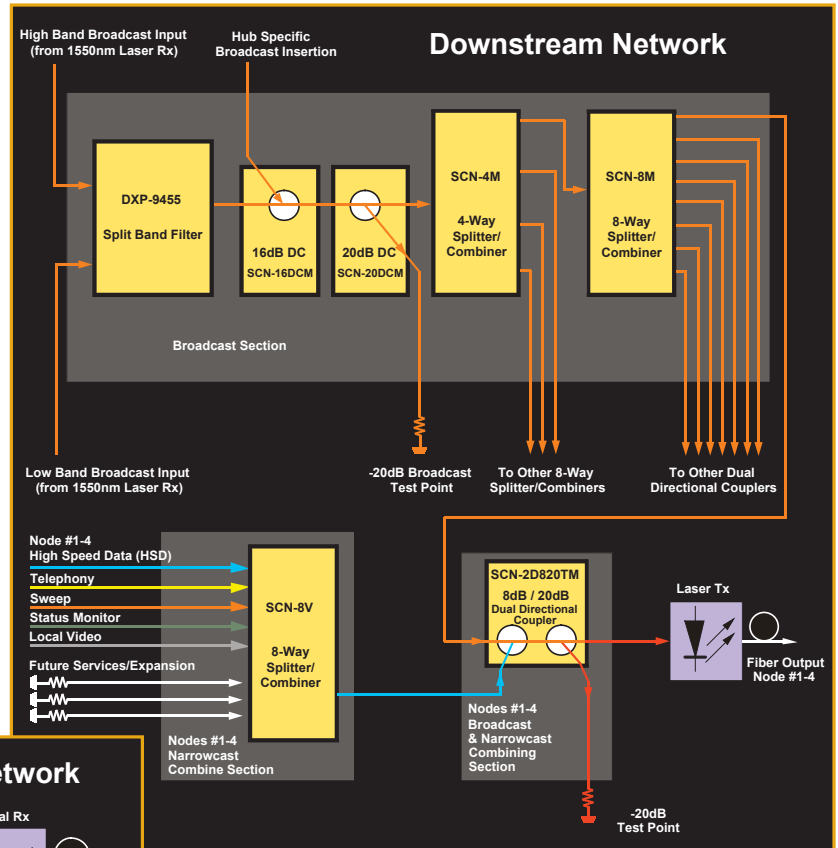
SCN-3000 Series Block Diagrams



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 & 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, & 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, & 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.

ISO
9001
REGISTERED