

## Features \& Benefits

As an active forward path distribution device, the unit provides up to 16 output ports with an ultra-fiat signal response for delivery to an optical transmitter in the frequency range $48-1002 \mathrm{MHz}$ or 48-1218 MHz.

- Provides for 5 Input Signals and up to 16 outputs.
- Built-in RF Switch microcontroller circuitry with self-calibration feature.
- A wide dynamic range of Input signal of greater than 40 dB , without any adjustment.
- RF amplifiers are arranged in a redundant configuration to increase system reliability.
- Load-sharing redundant power arrangement with contact closure alarms for all active components.
- Integrated device with modular active and passive parts to easy replacement, exchanging and upgrade.
- Custom designs welcomed.


## THREE YEAR PARTS AND LABOR WARRANTY INCLUDED

Model number ASF-103 is a Forward Path Active Distribution Device (Active Splitter), and is designed for typical usage within headend and hub site environments. The compact chassis is arranged for typical installation within a standard 19" EIA rack, and is completely modular while using only 1 rack unit of space. The system provides an ultra-flat RF output signal for final distribution to optical transport, is an extremely reliable and cost effective platform, and includes a very flexible feature set required for today's modern cable TV plant.

The system solution contains a built-in RF Switch microcontroller circuit that includes a self-calibration function designed to significantly reduce RF switch failures typically caused by unequal RF parameters at the RF detector circuit of each input.
The units are designed for the active distribution of up to 5 input signals which are combined and split into two separate groupings of 8 outputs each. The system is configured to work in conjunction with our passive narrowcast units.
Option ASF-103.1 has extended up to 1218 MHz working frequency band compare original model ASF-103.

See model numbers PNF-108, PNF-111 and PNF-112 Series of Narrowcast Combiner's solutions.

Inserting various amplifier gain blocks allows the system to be compatible with optical transmitters from legacy and current manufacturers. Multiple Test Ports, Amplifiers and Power Supply status LED's are provided on the front panel for maintenance and signal control.
All models include a redundant power supply configuration with a choice of either universal 90-260VAC, or a -48VDC power, and contact closure pin out alarms to monitor the status and performance of all amplifier and power supplies. An optional custom main input section module is also offered with built-in step attenuation or step equalization for system balancing of broadcast signals being introduced to the device.
The system allows for the introduction of advanced revenue generating services, without disrupting the network or its current content delivery. Furthermore, its' modular construction allows for design flexibility, optimum performance results, and compliance with all site requirements.

Please contact us for additional technical support or product information

CommDev LLC * 4500 N Hiatus Road, Suite 202 , Sunrise, FL 33351
E-mail: info@commdev.net, Web: www.commdev.net, Phone: +1(954)-746-4747

## Comm



Technical Specification:

| Parameters | Units | Spec |
| :---: | :---: | :---: |
| Bandwidth | MHz | 48-1002 / 48-1218 |
| Number of Inputs |  | 5 |
| Number of Outputs |  | 4/8/16 |
| Insertion Loss "Main Input" - Output (25dB Gain Amp) | $d B$ | $0.0 \pm 0.5 / 2.0 \pm 0.5$ |
| Insertion Loss Flatness | $d B$ | $\pm 0.5$ |
| Insertion Loss "AUX Inputs" - Outputs | $d B$ | $21.0 \pm 0.5 / 23.0 \pm 0.5$ |
| Return Loss all Ports, min | $d B$ | 20.0 |
| Isolation between Inputs and Outputs | $d B$ | 30.0 |
| Recommended Input Signal Level (132 ch., flat): Main Input AUX Inputs | $d B m V$ | $\begin{aligned} & 28 \\ & 50 \end{aligned}$ |
| C/N Ratio | $d B$ | 77 |
| RFI | $d B$ | 110 |
| Control Output (DB-15) |  | NC Contact each active part |
| Powering: Universal DC | $\begin{aligned} & V A C \\ & V D C \end{aligned}$ | $\begin{gathered} 98-240 / 50-60 \mathrm{~Hz} \\ -48 \end{gathered}$ |
| Dimensions | inch | 3.5Wx19Wx14D |
| Weight | lb | 8.3 |

## Ordering Information:

## Option One: (Recommended):

Customer will prepare and send to CommDev a detailed set of information regarding the signal conditions where the unit will be installed. The information required will include:

1. Customer selection of Main Input Section type
2. Total Number of Outputs
3. Type of Power Supply : AC Universal, DC -48 V, or combination.
4. Number of AC Inlets or Terminal Blocks for DC powering.
5. System Main Input channel loading condition to include the total quantity of Analog and Digital Channels, Low and High frequency for each group.
6. Maximum Input Signal Levels for each group of Channels, Tilt or Slope in groups.
7. Required Signal Level at Output for Analog or Digital channels

CommDev will provide the customer with all necessary calculations to determine the proper configuration for the system which will include: amplifier module selection, dB Gain level with Distortion calculations for required Output Signal Level.

## Option Two:

Customer to specify the first 6 positions of the Part Number of the required device according to picture


## For Example: Part Number:

"ASF3-SI-25-16-AC-2"
"ASF3" ASF-103 device with

## "SI"

" 25 "
Standard Input Section 1 Main and 4 Auxiliary Inputs
25 dB Gain Amplifiers
16 Outputs
AC Power Supplies - 2 pcs
2 pcs of AC power Inlets

