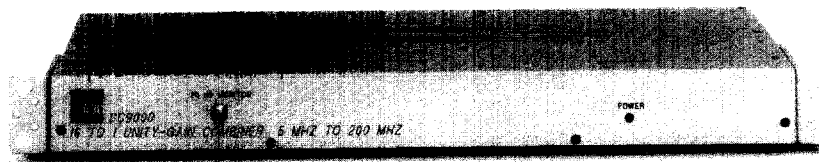


# 16 x 1 Unity Gain Combiner

## Description SC9000



### Features

- Reverse path combining with no insertion loss
- Excellent isolation (>60 dB at 50 MHz)
- Compact design
- High return loss
- 20 dB output monitor port
- Superior port-to-port isolation (56 dB at 100 MHz)

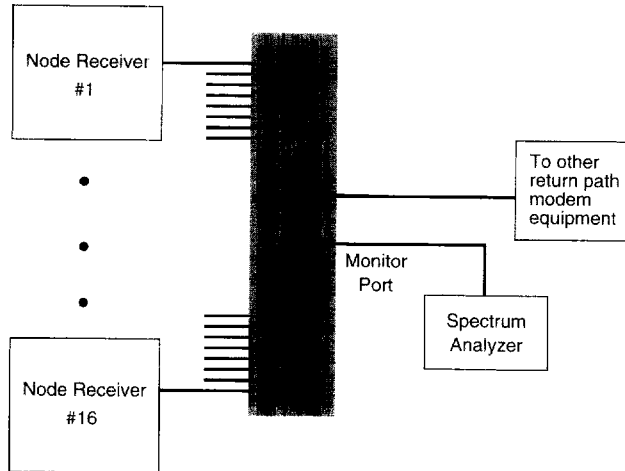
The challenges of the return path (5 - 200 MHz) are many. Low signal levels and the need for high isolation between return path signals make passive combining networks challenging to design. Overcoming the losses in passive networks requires both space and amplifiers. Frequency reuse requires high isolation that can be achieved using directional couplers. The directional coupler's high losses, however, deteriorate the already low level return path signals. How can these design problems be solved? ADC's SC9000 Unity Gain Combiner provides the answer.

The SC9000 combines sixteen return path signals with no insertion loss. Signals at the output are the same signal strength as the input. Amplifiers and the passive combining network are consolidated into a 1 RU panel. Featuring flat frequency response, excellent return loss, high port-to-port isolation and a 20 dB output monitor port, the SC9000 provides the electrical characteristics needed to meet the challenges of the return path.

Electrical paths that include frequency reuse require high electrical isolation between points that use the common frequency. The SC9000 features superior port-to-port isolation (56 dB at 100 MHz). This eliminates the need to use high loss directional couplers to achieve the required isolation.

# 16 x 1 Unity Gain Combiner

## Applications



*The return path RF signals are combined with no through loss and continue downstream to the return path modem equipment.*

## Ordering Information

Ordering Information	
Description	Catalog Number
<b>Unity Gain Combiner</b> 1.75" x 19" x 8.25" (4.45 x 48.26 x 20.95 cm); no power cord with 250V power cord	SC9000 SC9000-UK