

## Reverse Amplifier 93146

### Description

The reverse amplifier type 93146 provides a plug-in option for Compact amplifiers to enable two-way amplification in support of bi-directional services.

The reverse amplifier's fixed-value plug-in pads provide maximum user-friendliness and enable it to share common plug-in accessories with Compact amplifiers and thereby lower operator's cost of spares.

Furthermore, the unit features improved flatness and re-arranged test point reference for more straightforward reverse path alignment and common reference for signal injection point and test point. Both test point and signal injection point utilize directional couplers to ensure a precise reverse alignment that is virtually independent of impedance mismatches in the network.

The reverse amplifier features push-pull circuits, which are extremely overloading proof with very low intermodulation distortion at high output levels. Furthermore, the reverse amplifier is equipped with equalizer and attenuator at the output.

If no reverse amplification is needed, a 0 dB link type 74069 is used.

### Features

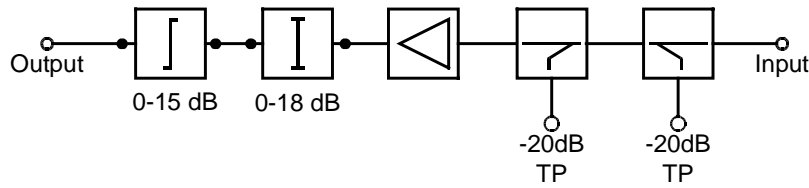
- Field-upgradeable plug-in option for Compact amplifiers
- Plug-in pads with fixed values for improved user-friendliness
- 5 – 65 MHz bandwidth
- Compact, reliable, flexible and efficient design
- Equalizer and attenuator at output
- Directional coupled, dedicated -20 dB test point and signal injection point
- Temperature compensation for minimum gain variation



# Reverse Amplifier 93146



## Block Diagram



## Specifications

General Performance	Units	93146	Notes
Reverse path	MHz	5 - 65	1
Gain	dB	21	
Attenuator, plug-in	dB	0 - 18	
Equalizer, plug-in	dB	0 - 15	
Number of inputs		1	
Return loss, typical	dB	23	
Output level; IMD3 ≥ 60 dB, EN 50083-5,3.2	dBμV	118.0	
Output level; IMD2 ≥ 60 dB, EN 50083-3,4.2.2	dBμV	112.0	
Noise figure	dB	≤ 4.5	
<b>Electrical</b>			
Supply voltage	V DC	24	
Power consumption (in amplifier)	W	1.5	2
<b>Environmental</b>			
Operating temperature range	°C	-20 to +55	
<b>Mechanical</b>			
Connectors		F	
Housing dimensions	mm	76 W x 22 H x 37 D	

### Notes:

1. Frequency range depends on the diplex filters
2. Depends on amplifier type (2W in 230 V versions within the 9318x series)

## Ordering Information

Description	Part Number
Reverse Amplifier, 5-65 MHz, 21 dB, one input, fixed-value plug-in attenuator and equalizer	A93146.10621

The following **Required Accessories** must be ordered separately

Required Accessories	Part Number
Plug-in Pads (attenuator/equalizer) available in 1.0 dB steps from 0 – 20 dB: <ul style="list-style-type: none"> <li>• 1 required for attenuation</li> <li>• 1 required for equalization</li> </ul>	A77140.00xx A77140.00xx



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