

	AM	FM	PhiM	Pulse
Phase modulation (PhiM)	+	-	/	+
Pulse modulation (Pulse)	(+)	+	+	/

4.4.2 Amplitude Modulation (AM)

An internal and/or external source can be selected for amplitude modulation. The LF modulation generator is available as the internal source.

Two-tone AM is possible by simultaneously switching on the external and internal source.

The [MOD EXT] input connector for external feed of analog modulation signals is at the front of the instrument. The coupling mode of the input (AC or DC) can be selected.

The AM modulation depth is limited by the maximum peak envelope power (PEP).

Exponential AM (Instruments with high frequency options)

Besides the linear amplitude modulation, whereby the signal voltage is proportional to the modulation signal, instruments equipped with the frequency options (R&S SMB-B112(L) /-B120(L) /-B140(L)) provide a level-proportional power or amplitude modulation.

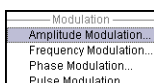
In this case, the R&S SMB exponentially distorts the modulation signal, before it is output at the [LF connector] - regardless of the [AM Source Int, or Ext](#). The [AM Depth](#) is then indicated in dB.



Signal Sources for Exponential AM

You can perform exponential AM using either the internal, or an external modulation signal. However, in contrast to linear AM, the signal at the LF output connector is distorted in any operating mode. [AM Source Int+Ext](#) is not available.

4.4.2.1 Amplitude Modulation Settings



To open the "Amplitude Modulation" dialog, select "Modulation > Configure > Amplitude Modulation" or use the [MENU] key under "Modulation".

In the upper section of the dialog, the modulation source is selected and the modulation switched on. The modulation source can be selected independently for the different modulation types and the LF output.

The configuration of the selected external and/or internal modulation source is performed in the lower section of the dialog or in the "LF Output" dialog (internal source only).

These settings affect all modulations which use the same modulation source.