

The R&S SMB provides the following types of modulation:

- AM (Amplitude Modulation)
- FM (Frequency Modulation)
- PhiM (Phase Modulation)
- PULM (Pulse Modulation)
- Stereo Modulation

In addition, the RF signal can be modulated with various internally generated modulation waveforms, like sine or rectangular signal waves. The basic unit (R&S SMB + frequency option) provides amplitude, frequency and phase modulation without additional equipment options, as well as a standard LF generator provided for internal modulation. Further available options are:

- R&S SMB-B5, Stereo/RDS Coder for performing stereo modulation
- R&S SMB-K21, Pulse Modulation for instruments with high frequency options
- R&S SMB-K22, Pulse Modulation for instruments equipped with frequency-options up to 6 GHz
- R&S SMB-K23, Pulse Generator for pulse signals
- R&S SMB-K27 Pulse Train for generating pulse train signals (only for instruments with serial number higher than 102400)

Settings for the modulation are made in separate modulation menus. These menus can be accessed in the block diagram by way of the "Modulation" function block, or by means of the menu with the same name which is opened using the [MENU] key.

4.4.1.1 Enabling/Disabling Analog Modulations using the MOD On/Off Key

The [MOD ON/OFF] key switches the modulations on and off.

[MOD ON/OFF]

Press the [MOD ON/OFF] key to enable/disable analog modulations.

Pressing the key again restores the status that was active before the last switch-off. "MOD OFF" is displayed in the info line of the header next to the "Level" field.

Remote command:

`[:SOURce<hw>] :MODulation [:ALL] [:STATe]` on page 376

4.4.1.2 Modulation Sources

The following modulations use internal and external modulation sources:

- Amplitude modulation
- Pulse modulation
- Frequency modulation
- Phase modulation