

**Options**  
**Title:** Simulate OOK decoding  
**Output Language:** Python  
**Generate Options:** QT GUI

**QT GUI Range**  
**ID:** tx\_freq  
**Default Value:** 223k  
**Start:** 1k  
**Stop:** 500k  
**Step:** 1k

**Variable**  
**ID:** samps\_per\_sym  
**Value:** 64

**Variable**  
**ID:** samp\_rate  
**Value:** 1M

**Noise Source**  
**Noise Type:** Gaussian  
**Amplitude:** 150m  
**Seed:** 0

**Vector Source**  
**Vector:** (0, 1, 0, 1, 0, 1,...  
**Tags:**  
**Repeat:** Yes

**Repeat**  
**Interpolation:** 64

**Multiply**

**Add**

**QT GUI Time Sink**  
**Name:** Transmitted signal  
**Number of Points:** 3k  
**Sample Rate:** 1M  
**Autoscale:** No

**Signal Source**  
**Sample Rate:** 1M  
**Waveform:** Cosine  
**Frequency:** 223k  
**Amplitude:** 1  
**Offset:** 0  
**Initial Phase (Radians):** 0

**Throttle**  
**Sample Rate:** 1M

**Signal Source**  
**Sample Rate:** 1M  
**Waveform:** Cosine  
**Frequency:** -223k  
**Amplitude:** 1  
**Offset:** 0  
**Initial Phase (Radians):** 0

**QT GUI Range**  
**ID:** rx\_freq  
**Default Value:** 223k  
**Start:** 1k  
**Stop:** 500k  
**Step:** 1k

**Multiply**

**QT GUI Time Sink**  
**Name:** Received signal  
**Number of Points:** 3k  
**Sample Rate:** 1M  
**Autoscale:** No

**QT GUI Constellation Sink**  
**Name:** Received constellation  
**Number of Points:** 1.024k  
**Autoscale:** No

cmd

cmd