Local Oscillator

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This block simulates a local oscillator.

Input Parameters

- opticalPower{ 1e-3 }
- wavelength{ 1550e-9 }
- frequency{ SPEED_OF_LIGHT / wavelength }
- phase{ 0 }
- samplingPeriod{ 0.0 }
- shotNoise{ false }

Methods

LocalOscillator()

LocalOscillator(vector¡Signal *¿ &InputSig, vector¡Signal *¿ &OutputSig) :Block(InputSig, OutputSig);

void initialize(void);

bool runBlock(void);

void setSamplingPeriod(double sPeriod)

void setOpticalPower(double oPower)

void setOpticalPower_dBm(double oPower_dBm)

void setWavelength(double wlength)

void setPhase(double lOscillatorPhase)

void setShotNoise(bool sNoise)

Functional description

This block generates a complex signal with a specified phase given by the input parameter *phase*.

Input Signals

Number: 0

Output Signals

Number: 1

Type: Optical signal

Examples

Sugestions for future improvement