

Operator

You can define equations for Math1 – Math10 by combining the following operators.

Operators and Examples

+, -, *, /	C1+C2
SHIFT	SHIFT(C1)
ABS	ABS(M1)
SQRT	SQRT(C2)
LOG	LOG(C1)
EXP	EXP(C1)
NEG	NEG(C1)
SIN	SIN(T)
COS	COS(C1)
TAN	TAN(C1)
ATAN	ATAN(C1,C2)
PH	PH(C1,C2)
DIF	DIF(C1)
DDIF	DDIF(C1)
INTG	INTG(C1)
IINTEG	IINTEG(C1)
BIN	BIN(C1)
P2	P2(C1)
P3	P3(C1)
F1	F1(C1,C2)
F2	F2(C1,C2)
FV	FV(C1)
PWHH	PWHH(M1)
PWHL	PWHL(C2)
PWLH	PWLH(C1)
PWLL	PWLL(C1)
PWXX	PWXX(C2)
DUTYH	DUTYH(C1)
DUTYL	DUTYL(C1)
FILT1	FILT1(C1)
FILT2	FILT2(C1)
HLBT	HLBT(C1)
MEAN	MEAN(C1)
LS-	LS-MAG(C1)
	LS-LOGMAG(C1)
	LS-PHASE(C1)
	LS-REAL(C1)
	LS-IMAG(C1)
PS-	PS-MAG(C1)
	PS-LOGMAG(C1)
PSD-	PSD-MAG(C1)
	PSD-LOGMAG(C1)
CS-	

Computation

Four arithmetical operations of the two specified waveforms
Displays the specified waveform with the phase shifted.
The absolute value of the specified waveform
The square root of the specified waveform
The logarithm of the specified waveform
The exponent of the specified waveform
The inversion of the specified waveform around level 0.
The sine of the specified waveform
The cosine of the specified waveform
The tangent of the specified waveform
The arc tangent of the two specified waveforms (a value within \pm)
The phase difference between the two specified waveforms
The differentiation of the specified waveform
The secondary differentiation of the specified waveform
The integration of the specified waveform
The secondary integration of the specified waveform
The binary conversion of the specified waveform
The square of the specified waveform
The cube of the specified waveform
$ C1^2+C2^2 $ of the specified waveform
$ C1^2-C2^2 $ of the specified waveform
The inverse of the PWHH of the pulse width
Pulse width computation from the rising edge to the next rising edge
Pulse width computation from the rising edge to the next falling edge
Pulse width computation from the falling edge to the next falling edge
Pulse width computation from the falling edge to the next rising edge
Pulse width computation from the rising or falling edge to the next rising or falling edge
Positive (high) duty cycle within each cycle of the specified waveform
Negative (low) duty cycle within each cycle of the specified waveform
Apply a filter to the specified waveform
Apply a filter to the specified waveform
The Hilbert's transform of the specified waveform
The moving average of the 10th order of the specified waveform
The amplitude of the specified waveform's linear spectrum
The logarithmic amplitude of the specified waveform's linear spectrum
The phase of the specified waveform's linear spectrum
The real part of the specified waveform's linear spectrum
The imaginary part of the specified waveform's linear spectrum
The amplitude of the specified waveform's power spectrum
The logarithmic amplitude of the specified waveform's power spectrum
The amplitude of the specified waveform's power spectrum density
The logarithmic amplitude of the specified waveform's power spectrum density

	CS-MAG(C1,C2)	The amplitude of the two specified waveforms' cross spectrum
	CS-LOGMAG(C1,C2)	The logarithmic amplitude of the two specified waveforms' cross spectrum
	CS-PHASE(C1,C2)	The phase of the two specified waveforms' cross spectrum
	CS-REAL(C1,C2)	The real part of the two specified waveforms' cross spectrum
	CS-IMAG(C1,C2)	The imaginary part of the two specified waveforms' cross spectrum
TF-		
	TF-MAG(C1,C2)	The amplitude of the two specified waveforms' transfer function
	TF-LOGMAG(C1,C2)	The logarithmic amplitude of the two specified waveforms' transfer function
	TF-PHASE(C1,C2)	The phase of the two specified waveforms' transfer function
	TF-REAL(C1,C2)	The real part of the two specified waveforms' transfer function
	TF-IMAG(C1,C2)	The imaginary part of the two specified waveforms' transfer function
CH-		
	CH-MAG(C1,C2)	The amplitude of the two specified waveforms' coherence function
K1 to K10		Constant

Measurement Parameters

Items	Description
Maximum	Max value
Minimum	Min value
High level	High value
Low level	Low value
Peak to peak value	P-P value (Max – Min)
Amplitude	Amplitude
Average	Average value
RMS	Rms value
Middle	Middle value of the Amplitude
Standard deviation	Standard deviation
Overshoot	Amount of overshoot
Undershoot	Amount of undershoot
Rise time	Rise time
Fall time	Fall time
Frequency	Frequency
Period	Period
Plus width	Plus width(+ side)
Minus width	Plus width(- side)
Duty	Duty cycle + Width/Period × 100[%]
Pulse Count	Nmber of pulse
Burst1	Burst width
Burst2	Burst width
Average frequency	Average frequency within the measurement range
Average period	Average period within the measurement range
Int1TY	The area under the positive amplitude
Int2TY	The area under the positive amplitude – the area under the negative amplitude