

# List of Messages

SCPI command: Command name in the short form.

\*RST: "Yes" for commands that are affected by \*RST.

R/W: "R" for query commands and "W" for set commands.

## FETCH | READ | MEASure subsystem

SCPI command		Value		Response	*RST	Description	R/W
Program header			Unit				
FETCH[:SCAL]   READ[:SCAL]   MEAS[:SCAL]							
:CURR	:AC		A	NR3		Queries the current	R
	:AC:INTEG		AH	NR3, NR3		Queries the integrated current	R
	:AMPL:MAX		A	NR3		Queries the current peak	R
	:CRES			NR3		Queries the current crest factor	R
:VOLT	:AC		V	NR3		Queries the voltage	R
	:AMPL:MAX		V	NR3		Queries the voltage peak	R
	:CRES			NR3		Queries the voltage crest factor	R
:POW	:AC[:REAL]		W	NR3		Queries the active power	R
	:AC:INTEG		WH	NR3, NR3		Queries the integrated power	R
	:AC:APP		VA	NR3		Queries the apparent power	R
	:AC:REAC		VAR	NR3		Queries the reactive power	R
	:AC:PFAC			NR3		Queries the power factor	R
	:AC:PHAS		DEG	NR3		Queries the phase angle	R
:FREQ			HZ	NR3		Queries the frequency	R
:TIM:INTEG			HR, MIN, S, MS	NR3, NR3, NR3, NR3		Queries the integration time	R

## SENSe subsystem

SCPI command		Value		Default	Response	*RST	Description	R/W
Program header	Parameter		Unit					
SENS:								
:CURR	:RANG[:UPP]	numeric	0.005 to 20	20	NR3	Yes	Sets the current range	R/W
	:RANG:AUTO	bool		ON	NR1	Yes	Sets the auto current range on/off status	R/W
	:SCAL[:STAT]	bool		OFF	NR1	Yes	Sets the current scaling on/off status	R/W
	:SCAL:CTR	numeric	1 to 2000		1	NR3	Yes	Sets the scaling CT ratio
:VOLT	:RANG[:UPP]	numeric	150, 300	300	NR3	Yes	Sets the voltage range	R/W
	:RANG:AUTO	bool		ON	NR1	Yes	Sets the auto voltage range on/off status	R/W
	:SCAL[:STAT]	bool		OFF	NR1	Yes	Sets the voltage scaling on/off status	R/W
	:SCAL:PTR	numeric	1 to 2000		1	NR3	Yes	Sets the scaling PT ratio
:FILT	[:LINE:STAT]	bool		OFF	NR1	Yes	Sets the low pass filter	R/W
	:FREQ[:STAT]	bool		ON	NR1	Yes	Sets the frequency filter	R/W
:AVER:COUN	numeric	1 to 64		1	NR3	Yes	Sets the average count	R/W
:UPD:CYCL	numeric	0.1 to 10	S	0.1	NR3	Yes	Sets the panel display update interval	R/W
:SNYC	char	VOLT   CURR   OFF		VOLT	char	Yes	Sets the synchronization source	R/W

## INTEGrate subsystem

SCPI command		Value		Default	Response	*RST	Description	R/W
Program header	Parameter		Unit					
INTEG								
:STAR[:STAT]	bool				NR1		Starts and stops integration	R/W
:RES					NR1		Clears the integrated results	R/W
:TIM[:STAT]	bool			OFF	NR1	Yes	Turns the integration time on and off	R/W
:TIM:COUN	NR1,NR1,NR1	0,1,0 to 9999,59,0	HR,MIN,S	0,1,0	NR1,NR1,NR1	Yes	Sets the integration time	R/W

## STATus subsystem

SCPI command		Value	Response	Description	R/W
Program header	Parameter				
STAT					
:OPER					
[:EVEN]			NR1	Event <sup>1</sup>	R
:COND			NR1	Register status <sup>1</sup>	R
:ENAB	NRf	0 to 32767	NR1	Enable <sup>1</sup>	R/W
:PTR	NRf	0 to 32767	NR1	Positive transition <sup>1</sup>	R/W
:NTR	NRf	0 to 32767	NR1	Negative transition <sup>1</sup>	R/W
:PRES				Resets the enable register	W
:QUES					
[:EVEN]			NR1	Event <sup>2</sup>	R
:COND			NR1	Register status <sup>2</sup>	R
:ENAB	NRf	0 to 32767	NR1	Enable <sup>2</sup>	R/W
:PTR	NRf	0 to 32767	NR1	Positive transition <sup>2</sup>	R/W
:NTR	NRf	0 to 32767	NR1	Negative transition <sup>2</sup>	R/W

- 1 OPERation status register
- 2 QUESTionable status register



## SYSTEM subsystem

SCPI command		Value	Default	Response	*RST	Description	R/W
Program header	Parameter						
SYST							
:ERR[:NEXT]				string		Reads error information	R
:BACK						Saves panel settings and configuration settings	W
:KLOC	bool		OFF	NR1		Locks panel operations	R/W
:LOC						Switches the KPM1000 to local mode	W
:OPT				char		Queries the options	R
:REM						Switches the KPM1000 to remote mode; locks all panel keys except for the LOCAL switch	W
:RWL						Switches the KPM1000 to remote mode; locks all panel keys	W
:VERS						Queries the SCPI specification version with which the KPM1000 complies	R
:COMM:TRAC	bool			NR1		Sets the communication error display	R/W
:DISP:HOLD	bool			NR1		Sets the holding of displayed values	R/W
:DISP:CONT	NR1	1 to 4				Sets which measured values are shown on the displays	R/W
	char	V A AHP AHN W VA VAR HZ WH WHP WHN TIM AH PA PV CFA CFV DEG PF	1: V 2: VA 3: A 4: W	char			

### TRIGger subsystem

SCPI command		Value		Default	Response	*RST	Description	R/W
Program header	Parameter		Unit					
ABOR							Aborts the operation of all sequences	W
INIT								
[:IMM]								
	:NAME	char	ACQ				Starts the trigger function	W
	[:SEQ1]							W
:CONT								
	:NAME	char	ACQ			Yes	Sets the auto continue mode	R/W
		bool		OFF	NR1			
	:SEQ1	bool		OFF	NR1	Yes		
TRIG[SEQ[1]]   TRIG[:ACQ]								
[:IMM]								
	:SOUR	char	IMM   BUS	IMM	char	Yes	Sets the trigger source	R/W

### WAVE subsystem

SCPI command		Value	Response	*RST	Description	R/W
Program header	Parameter					
WAVE	NR3	1 to 16384	NR3_NR3, NR3_NR3, . . .		Queries the waveform data	R

### IEEE 488.2 common commands

IEEE488.2 common commands	Parameter	Description	R/W
*CLS		Clears all the event registers	W
*ESE	NR1	Sets the event status enable register bits	R/W
*ESR		Queries the event status register	R
*IDN		Queries the identification string (manufacturer information)	R
*OPC		Causes the KPM1000 to generate the operation complete message in the event status register when all of its pending operations have finished	R/W
*OPT		Queries the options that are installed in the KPM1000	R
*PSC	0   1	Sets whether the *ESE and *SRE settings will be cleared	R/W
*RST		Performs a device reset; configures the KPM1000 to a known condition independent from the usage history of the device	W
*SRE	NR1	Sets the service request enable register bits	R/W
*STB		Reads the status byte and master summary status bits	R
*TRG		Trigger command	W
*TST		Executes a self test	R
*WAI		Prevents the KPM1000 from executing subsequent commands or queries until the flag indicating that there are no operations standing by becomes true	W

