List of Messages

SCPI command: Short form commands

Affected commands: Commands that are affected by a result of the *RST and *RCL commands are indicated as Yes.

R and W denote query command (R) and set command (W), respectively.

†: 1, 2, and 3 indicate SCPI standard command, command in review, and KIKUSUI original command, respectively.

[SENSe] and CONFigure functions

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CONF:<meter_fn>		
[SENSe:]								
FUNCtion								
[:ON]	"[XNONe:]<meter_fn>"[,<"[XNONe:]<meter_fn>">[,<"[XNONe:]<meter_fn>">]]	Current assigned measurement function name	Yes	Yes			R/W	1
ALL	(no param)						W	1
COUNt		Number of current assigned measurement functions					R	1
CONCurrent	<boolean>		Yes	Yes			W	1
IMPedance								
:RANGe								
[:UPPer]	{<numeric> | MIN | MAX | DEF}	<numeric>					R/W	3
AUTO	<boolean>	<boolean>	Yes	Yes	Yes	Yes	R/W	3
:CURRent								
:AC								
[:LEVel]	{<numeric> | MIN | MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	3
:MODe*1	{FIX | MANual | AUTo}	{FIX | MAN | AUT}	Yes	Yes	Yes	Yes	R/W	3
:VARiable*1	{<numeric> | MIN | MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	3
:FEEDback*1	{<numeric> | MIN | MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	3
:FREQuency	{<numeric> | MIN | MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	3
:AVERage								
[:INTegral]								
:COUNt			Yes	Yes	Yes	Yes	R/W	3
:MOVing								
:COUNt	{<numeric> | MIN | MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	3
VOLTage[:DC]								
:RANGe								
[:UPPer]	{<numeric> | MIN | MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	1
AUTO	<boolean>	<boolean>	Yes	Yes	Yes	Yes	R/W	1
CURRent[:DC]								
:RANGe								
[:UPPer]	{<numeric> | MIN | MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	1
AUTO	<boolean>	<boolean>	Yes	Yes	Yes	Yes	R/W	1

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CONF:<meter_fn>		
CONFigure								
[:SCALar]		"<configuration_info>"					R	1
:IMPedance	[<expected_value>[,<resolution>]]						W	3
:VOLTage[:DC]	[<expected_value>[,<resolution>]]						W	1
:CURRent[:DC]	[<expected_value>[,<resolution>]]						W	1

*1. KFM2005 only.

INPut and SOURce functions

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CONF:<meter_fn>		
INPut								
[:STATe]	<boolean>	<boolean>	Yes	Yes			R/W	1
:PROTection								
:CLEar	(no param)						W	3
SOURce								
:CURRent[:DC]								
[:LEVel]	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes			R/W	1
:RANGe								
[:UPPer]	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes			R/W	1
:SOURce	{INTernal | EXTernal}	{INT | EXT}	Yes	Yes			R/W	3
:VOLTage[:DC]								
:PROTection								
:UNDer	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes			R/W	3
:DELay	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes			R/W	3
:LOWer	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes			R/W	3
:DELay	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes			R/W	3

MEASure & TRIGger functions

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CONF:<meter_fn>		
FETCh								
[:SCALar]/ARRay	[<expected_value>[,<resolution>]]	<value,value,value,...>					R	1
:IMPedance								
[:MAGNitude]	[<expected_value>[,<resolution>]]	<Z,Z,Z,...>					R	3
:RESistance	[<expected_value>[,<resolution>]]	<R,R,R,...>					R	3
:REACtance		<JX,JX,JX,...>					R	3
:PHASe		<theta,theta,theta,...>					R	3
:VOLTage [:DC]	[<expected_value>[,<resolution>]]	<volt, volt, volt, ...>					R	1
:CURRent [:DC]	[<expected_value>[,<resolution>]]	<curr>					R	1
READ								
[:SCALar]/ARRay	[<expected_value>[,<resolution>]]	<value,value,value,...>					R	1
:IMPedance								
[:MAGNitude]	[<expected_value>[,<resolution>]]	<Z,Z,Z,...>					R	3
:RESistance	[<expected_value>[,<resolution>]]	<R,R,R,...>					R	3
:REACtance		<Jx,JX,Jx,...>					R	3
:PHASe		<theta,theta,theta,...>					R	3
:VOLTage [:DC]	[<expected_value>[,<resolution>]]	<volt, volt, volt, ...>					R	1
:CURRent [:DC]	[<expected_value>[,<resolution>]]	<curr>					R	1
MEASure								
[:SCALar]:<meter_fn>/ ARRay	[<expected_value>[,<resolution>]]	<value,value,value,...>					R	1
:IMPedance								
[:MAGNitude]	[<expected_value>[,<resolution>]]	<Z,Z,Z,...>					R	3
:RESistance	[<expected_value>[,<resolution>]]	<R,R,R,...>					R	3
:REACtance		<Jx,JX,Jx,...>					R	3
:PHASe		<theta,theta,theta,...>					R	3
:VOLTage [:DC]	[<expected_value>[,<resolution>]]	<volt, volt, volt, ...>					R	1
:CURRent [:DC]	[<expected_value>[,<resolution>]]	<curr>					R	1
ABORt[:ALL]	(no_param)						W	1
INITiate								
[:IMMediate]								
[:ALL]	(no_param)						W	1
:SEQuence[1]							W	1
:SEQuence2							W	1

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CONF:<meter_fn>		
TRIGger								
[:SEQuence[1]]								
:COUNt	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	1
:TIMer	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	1
:SOURce	{BUS | IMMediate | TIMer}	{ BUS |IMM | TIM}	Yes	Yes	Yes	Yes	R/W	1
:SEQuence2								
:COUNt	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	1
:TIMer	{<numeric> | MIN| MAX | DEF}	<numeric>	Yes	Yes	Yes	Yes	R/W	1
:SOURce	{BUS | IMMediate | TIMer}	{BUS |IMM | TIM}	Yes	Yes	Yes	Yes	R/W	1

SYSTem functions

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CONF:<meter_fn>		
SYSTem								
:VERSion		<scpi_version>					R	1
:ERRor								
[:NEXT]		<code>,"<description>"					R	1
:GTLocal							W	3
:LOCal							W	3
:LLOut							W	3
:RWLock							W	3
:RENable	[<boolean>]						W	3
:REMote	[<boolean>]						W	3

DISPlay functions

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CON:<meter_fn>F		
DISPlay:SELect	"<disp_item1>","<disp_item2>","<disp_item3>","<disp_item4>"	"<disp_item1>","<disp_item2>","<disp_item3>","<disp_item4>"					R/W	3

UNIT functions

SCPI Command	Setting	Response	Affected Command				R/W	†
			*RST	*RCL	MEAS:<meter_fn>?	CONF:<meter_fn>		
UNIT								
:CURRent:AC	{A |ARMS| APP}	{A |ARMS| APP}	Yes	Yes			R/W	3
:ANGLe	{DEG|RAD}	{DEG|RAD}	Yes	Yes			R/W	3

STATus functions

SCPI Command	Setting	Response	R/W	†
STATus				
:OPERation				
[:EVENt]		<event>	R	1
:CONDition		<condition>	R	1
:ENABle	<numeric>		W	1
:PTRansition	<numeric>	<numeric>	W/R	1
:NTRansition	<numeric>	<numeric>	W/R	1
:MEASuing				
[:EVENt]		<event>	R	3
:CONDition		<condition>	R	3
:ENABle	<numeric>		W	3
:PTRansition	<numeric>	<numeric>	W/R	3
:NTRansition	<numeric>	<numeric>	W/R	3
:TRIGger				
[:EVENt]		<event>	R	3
:CONDition		<condition>	R	3
:ENABle	<numeric>		W	3
:PTRansition	<numeric>	<numeric>	W/R	3
:NTRansition	<numeric>	<numeric>	W/R	3
:PROTecting				
[:EVENt]		<event>	R	3
:CONDition		<condition>	R	3
:ENABle	<numeric>		W	3
:PTRansition	<numeric>	<numeric>	W/R	3
:NTRansition	<numeric>	<numeric>	W/R	3
:QUEStionable				
[:EVENt]		<event>	R	1
:CONDition		<condition>	R	1
:ENABle	<numeric>		W	1
:PTRansition	<numeric>	<numeric>	W/R	1
:NTRansition	<numeric>	<numeric>	W/R	1

Common Commands

IEEE488.2 Common Commands	Setting	R/W
*CLS	Clears the status data structures.	W
*ESE	Sets the standard event status enable register bits.	R/W
*ESR?	Queries the standard event status register.	R
*IDN?	Queries the identification string. (Manufacturer information)	R
*OPC	Causes the device to generate the operation complete message in the standard event status register when all pending selected device operations have been finished.	R/W
*RCL	Restores the current settings of the device from a copy stored in local memory.	W
*RST	Performs a device reset. Configures the KFM2005/KFM2030 to a known condition independent from the usage history of the device.	W
*SAV	Stores the current settings of the device to local memory.	W
*SRE	Sets the service request enable register bits.	R/W
*STB?	Reads the status byte and the master summary status bit.	R
*TRG	Trigger command. This is analogous to the GroupExecuteTrigger interface message defined in IEEE488.1. See section 6.1.4.2.5 of IEEE488.2.	W
*TST?	Since there is no self-test function built into the KFM2005/KFM2030, an ASCII character 0 is always returned in the output queue in response to this query.	R
*WAI	Prevents the device from executing subsequent commands or queries until the No Operation Pending flag becomes true.(*OPC?)	W