

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.

INST: “Yes” for commands that you can use the INST command to specify the target channel of.

SOURCE subsystem

SCPI command		Response	*RST	Description	R/W	INST
Program header	Parameter					
[SOUR:]						
CURR[:LEV][:IMM][:AMPL]	numeric	NR3	Yes	Current	R/W	Yes
CURR:EXT:RANG	LOW HIGH	char	Yes	CC control range used during external control	R/W	Yes
CURR:EXT:SOUR	NONE VOLT	char	Yes	Whether constant current will be controlled externally	R/W	Yes
CURR:LIM:AUTO	bool	NR1	Yes	Current control	R/W	Yes
CURR:PROT[:LEV]	numeric	NR3	Yes	OCV trip point	R/W	Yes
CURR:PROT:DEL	numeric	NR3	Yes	Detection time of OCP activation	R/W	Yes
CURR[:LEV]:TRIG[:AMPL]	numeric	NR3	Yes	Current that will be set when a trigger is received	R/W	Yes
RES	numeric	NR3	Yes	Internal Resistance	R/W	Yes
VOLT[0][:LEV][:IMM][:AMPL]	numeric	NR3	Yes	Voltage	R/W	Yes
VOLT:EXT:RANG	LOW HIGH	char	Yes	CV control range used during external control	R/W	Yes
VOLT:EXT:SOUR	NONE VOLT	char	Yes	Whether constant current will be controlled externally	R/W	Yes
VOLT:LIM:AUTO	bool	NR1	Yes	Voltage control	R/W	Yes
VOLT:LIM:LOW	numeric	NR3	Yes	UVL trip point	R/W	Yes
VOLT:PROT[:LEV]	numeric	NR3	Yes	OVP trip point	R/W	Yes
VOLT[:LEV]:TRIG[:AMPL]	numeric	NR3	Yes	Voltage that will be set when a trigger is received	R/W	Yes

OUTPUT subsystem

SCPI command		Response		Description	R/W	INST
Program header	Parameter					
OUTP						
[:STAT][:IMM]	bool	NR1	Yes	Output on/off	R/W	Yes
:EXT[:STAT]	bool	NR1	Yes	Output on/off for external control	R/W	Yes
:EXT:LOG	LOW HIGH	char	Yes	Output on/off logic during external control	R/W	Yes
:ISOL		NR1		Queries the isolation relay control signal	R	Yes
:PROT:CLE				Alarm clearing	W	Yes
:PROT:WDOG	numeric	NR3		Communication monitoring	R/W	Yes
:PON[:STAT]	SAFE AUTO FORC	char		Power-on state	R/W	Yes
:SENS		NR1		Queries the sens relay signal	R	Yes
[:STAT]:TRIG	bool	NR1	Yes	Output that will be set when a trigger is received	R/W	Yes

MEASURE subsystem

SCPI command		Response	*RST	Description	R/W	INST
Program header	Parameter					
MEAS[:SCAL]:						
[:SCAL]:CURR[:DC]		NR3		Queries the measured output current	R	Yes
[:SCAL]:VOLT[:DC]		NR3		Queries the measured output voltage	R	Yes

TRIGger subsystem

SCPI command		Response	*RST	Description	R/W	INST
Program header	Parameter					
ABOR				Aborts the trigger function	W	
INIT[:IMM][:TRAN]				Starts the trigger function	W	
TRIG[:TRAN][:IMM]				Executes a software trigger	W	
TRIG[:TRAN]:SOUR	IMM BUS	char	Yes	Sets the trigger source	R/W	Yes

DISPlay subsystem

SCPI command		Response	*RST	Description	R/W	INST
Program header	Parameter					
DISP						
:BRIG	NR1	NR1		Panel display brightness	R/W	Yes

INSTrument subsystem

SCPI command		Response	*RST	Description	R/W	INST
Program header	Parameter					
INST						
:CAT				Queries the multichannel configuration	R	
[:SEL]:NSEL]	NR1	NR1	Yes	Specifies the channel	R/W	

GLOBal subsystem

SCPI command		Response	*RST	Description	R/W	INST
Program header	Parameter					
GLOB						
:CURR[:LEV][:IMM][:AMPL]	numeric			Current of all channels	W	
:OUT[:STAT]	bool			Output on/off for all channels	W	
:VOLT[0][:LEV][:IMM][:AMPL]	numeric			Voltage of all channels	W	



STATus subsystem

SCPI command		Response	Description	R/W	INST
Program header	Parameter				
STAT					
:OPER					
:EVEN]		NR1	Event ¹	R	
:COND		NR1	Register status ¹	R	
:ENAB	NRf	NR1	Enable ¹	R/W	
:PTR	NRf	NR1	Positive transition ¹	R/W	
:NTR	NRf	NR1	Negative transition ¹	R/W	
:INST					
:EVEN]		NR1	Event ²	R	
:COND		NR1	Register condition ²	R	
:ENAB	NRf	NR1	Enable ²	R/W	
:PTR	NRf	NR1	Positive transition ²	R/W	
:NTR	NRf	NR1	Negative transition ²	R/W	
:ISUM<n> ³					
:EVEN]		NR1	Event ⁴	R	
:COND		NR1	Register condition ⁴	R	
:ENAB	NRf	NR1	Enable ⁴	R/W	
:PTR	NRf	NR1	Positive transition ⁴	R/W	
:NTR	NRf	NR1	Negative transition ⁴	R/W	
:PRES			Resets the enable register	W	
:QUES					
:EVEN]		NR1	Event ⁵	R	
:COND		NR1	Register status ⁵	R	
:ENAB	NRf	NR1	Enable ⁵	R/W	
:PTR	NRf	NR1	Positive transition ⁵	R/W	
:NTR	NRf	NR1	Negative transition ⁵	R/W	
:INST					
:EVEN]		NR1	Event ⁶	R	
:COND		NR1	Register condition ⁵	R	
:ENAB	NRf	NR1	Enable ⁵	R/W	
:PTR	NRf	NR1	Positive transition ⁵	R/W	
:NTR	NRf	NR1	Negative transition ⁵	R/W	
:ISUM<n> ³					
:EVEN]		NR1	Event ⁷	R	
:COND		NR1	Register condition ⁷	R	
:ENAB	NRf	NR1	Enable ⁷	R/W	
:PTR	NRf	NR1	Positive transition ⁷	R/W	
:NTR	NRf	NR1	Negative transition ⁷	R/W	

- 1 OPERation status register
- 2 OPERation:INSTrument subregister
- 3 Use <n> to specify the channel number
- 4 OPERation:INSTrument:ISUMmary subregister
- 5 QUEStionable status register
- 6 QUEStionable:INSTrument subregister
- 7 QUEStionable:INSTrument:ISUMmary subregister

SYSTem subsystem

SCPI command		Response	*RST	Description	R/W	INST
Program header	Parameter					
SYST						
:COMM:RLST	LOC REM RWL	char		Remote/local	R/W	
:CONF						
:BLEeder	bool	NR1		Bleeder on/off	R/W	Yes
:MAST		NR1		Master-slave parallel operation	R	Yes
:MON:RANG	LOW HIGH	char		Range for voltage and current monitoring	R/W	Yes
:PROT:REC	SAFE AUTO	char		Method for clearing OHP, FAN, AC-FAIL, and SD alarms	R/W	Yes
:STAR:PRI	CC CV	char		Output-on startup state	R/W	Yes
:ERR[:NEXT]		string		Reads error information	R	
:ERR:TRAC	bool	NR1		Communication error display	R/W	
:KLOC	bool	NR1		Panel operation lock	R/W	Yes
:LANG[:SEL]	"SCPI" "GEN"	string		Command language	R/W	
:LANG:EMUL	"NONE" "N5700" "GEN"	string		Emulation	R/W	
:LOC				Switches the PWX to local mode	W	
:NET:TERM	1 2 3 4	NR1		Terminators	R/W	
:REM				Sets the PWX to remote mode; locks all panel controls, except the LOCAL key	W	
:RWL				Sets the PWX to remote mode; locks panel controls	W	
:VERS				Queries SCPI specification version that the PWX complies with	R	



IEEE 488.2 common commands

IEEE488.2 common commands	Parameter	Description	R/W	INST
*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 PWX to generate the operation complete message in the event status register when all of its pending operations have finished	R/W	
*OPT		Queries the optional interface boards and enhanced functions that are installed in the PWX	R	
*PSC	bool	Sets whether the *ESE and *SRE settings will be cleared	R/W	
*RCL	NR1	Loads the settings that have been stored to memory		
*RST		Resets the PWX. Configures the PWX to a known condition independent from the usage history of the device	W	
*SAV	NR1	Saves the current settings to memory		
*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 PWX from executing subsequent commands or queries until the flag indicating that there are no operations standing by becomes true	W	