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.

SOURce subsystem

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
ARB:APPL				Applies the I-V characteristics map and reflects it in the output.	W
ARB:CLE				Returns the I-V characteristics map to its default setting.	W
ARB:COUN	numeric	NR1		Sets the number of data points of the I-V characteristics map.	R/W
ARB:DATA	numeric	NRf		Sets the I-V characteristics map in block data format.	R/W
ARB:MAP	numeric	NR3		Sets the voltage and current values for the specified parts of the I-V characteristics map.	R/W
ARB:MAP:LIST?		NR3		Queries the entire contents of the I-V characteristics map.	R
ARB:RESP	numeric	NR3	Yes	Sets the response speed in ARB mode.	R/W
COND	numeric	NR3	Yes	Sets the conductance in CR mode.	R/W
COND:EXT:FCON	bool	bool	Yes	Enables/disables external control of CR mode.	R/W
COND:PULS:LEV	numeric	NR3	Yes	Sets the pulse conductance.	R/W
COND:PULS:FREQ	numeric	NR3	Yes	Sets the pulse frequency.	R/W
COND:PULS:DCYC	numeric	NR3	Yes	Sets the pulse duty cycle.	R/W
COND:RANG	LOW|MED|HIGH	char	Yes	Sets the CR mode range.	R/W
COND:RESP	NORM|FAST	char	Yes	Sets the response speed in CR mode.	R/W
CURR	numeric	NR3	Yes	Sets the current in CC mode.	R/W
CURR:EXT:ACON	bool	bool	Yes	Enables/disables external superimposed input in CC mode.	R/W
CURR:EXT:FCON	bool	bool	Yes	Enables/disables external control in CC mode.	R/W
CURR:PROT	numeric	NR3	Yes	Sets the current value for overcurrent protection (OCP).	R/W
CURR:PROT:STAT	bool	bool	Yes	Sets whether to turn the load off when overcurrent protection (OCP) is activated.	R/W
CURR:PULS:LEV	numeric	NR3	Yes	Sets the pulse current.	R/W
CURR:PULS:FREQ	numeric	NR3	Yes	Sets the pulse frequency.	R/W
CURR:PULS:DCYC	numeric	NR3	Yes	Sets the pulse duty cycle.	R/W
CURR:SINE:AMPL	numeric	NR3	Yes	Sets the pulse amplitude.	R/W
CURR:SINE:FREQ	numeric	NR3	Yes	Sets the pulse frequency.	R/W
CURR:SLEW	numeric	NR3	Yes	Sets the slew rate value.	R/W
CURR:SST	numeric	NR3	Yes	Sets the current’s soft start time.	R/W
FUNC	CC|CR|CV|CP|ARB	char	Yes	Sets the operation mode.	R/W
FUNC:CVOP	bool	bool	Yes	Enables or disables +CV mode.	R/W
POW	numeric	NR3	Yes	Sets the power of CP mode.	R/W
POW:EXT:FCON	bool	bool	Yes	Enables/disables external control in CP mode.	R/W
POW:PROT	numeric	NR3	Yes	Sets the power of overpower protection (OPP).	R/W
POW:PROT:STAT	bool	bool	Yes	Sets whether to turn the load off when overpower protection (OPP) is activated.	R/W

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
PROG	string	string	Yes	Selects or deselects a programs.	R/W
PROG:CRE	string			Creates a new program of the specified name.	W
PROG:CURR:PROT	numeric	NR3		Sets the current value for overcurrent protection (OCP) in the selected program.	R/W
PROG:CURR:PROT:ACT	LIM|TRIP	char		Sets the operation when overcurrent protection (OCP) is activated in the selected program.	R/W
PROG:CURR:PROT:STAT	bool	bool			
PROG:CVOP:LEV	numeric	NR3		Sets the voltage at +CV (addition of CV mode) application in the selected program.	R/W
PROG:DEL	string			Deletes the program of the specified name.	W
PROG:LIST?		string		Retrieves the list of registered programs.	R
PROG:LOOP	numeric	NR1		Sets the number of times that the selected program will repeat.	R/W
	INF	char			
PROG:POW:PROT	numeric	NR3		Sets the power of overpower protection (OPP) in the selected program.	R/W
PROG:POW:PROT:ACT	LIM|TRIP	char		Sets the operation to be performed when overpower protection (OPP) is activated in the selected program.	R/W
PROG:POW:PROT:STAT	bool	bool			
PROG:REN	string			Changes the name of the selected program.	W
PROG:SAVE				Saves the selected program.	W
PROG:STEP<n>:DWEL	numeric	NR3		Sets the step execution time at the specified step of the selected program.	R/W
PROG:STEP<n>:INP	bool	bool		Sets whether to turn the load on at the specified step of the selected program.	R/W
PROG:STEP<n>:LEV	numeric	NR3		Sets the load at the specified step of the selected program.	R/W
PROG:STEP<n>:OUTP	bool	bool		Sets whether to turn the load on at the specified step of the selected program.	R/W
PROG:STEP<n>:TRAN	IMM|RAMP	char		Sets the setting transition method of the selected program.	R/W
PROG:STEP<n>:SLEW	numeric	NR3		Sets the slew rate at the specified step of the selected program.	R/W
PROG:STEP<n>:TRIG:GEN	char	char		Sets whether to perform trigger output at the specified step of the selected program.	R/W
PROG:STEP<n>:TRIG:WAIT	char	char		Sets trigger wait at the specified step of the selected program.	R/W
PROG:STEPS:COUN	numeric	NR1		Sets the number of steps to be registered to the selected program.	R/W
PROG:VOLT:PROT:ACT	LIM|TRIP	char		Sets the operation to be performed when underpower protection (UVP) is activated in the selected program.	R/W
PROG:VOLT:PROT:LOW	numeric	NR3		Sets the voltage of underpower protection (UVP) in the selected program.	R/W
PROG:VOLT:PROT:STAT	bool	bool		Enables/disables undervoltage protection (UVP) in the selected program.	R/W
VOLT	numeric	NR3	Yes	Sets the voltage of CV mode.	R/W
VOLT:EXT:FCON	bool	bool		Enables/disables external control in CV mode.	R/W
VOLT:PROT:LOW	numeric	NR3	Yes	Sets the voltage of underpower protection (UVP).	R/W
VOLT:PROT:ACT	LIM|TRIP	char		Sets the operation to be performed when underpower protection (UVP).	R/W
VOLT:PROT:STAT	bool	bool	Yes	Enables/disables undervoltage protection (UVP).	R/W
VOLT:RESP	NORM|FAST	char	Yes	Sets the response speed in CV mode.	R/W

INPut/OUTPut subsystem

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
INP OUTP	bool[,numeric]	bool	Yes	Sets load on/off. Only when load is set to on, specify the duration to keep the load turned on.	R/W
INP:CUTO:CAP OUTP:CUTO:CAP	numeric	NR3	Yes	Sets the integrated current of the cutoff function.	R/W
INP:CUTO:CAP:STAT OUTP:CUTO:CAP:STAT	bool	bool	Yes	Enables or disables the cutoff function for the integrated current.	R/W
INP:CUTO:ENER OUTP:CUTO:ENER	numeric	NR3	Yes	Sets the integrated power of the cutoff function.	R/W
INP:CUTO:ENER:STAT OUTP:CUTO:ENER:STAT	bool	bool	Yes	Enables or disables the cutoff function for the integrated power.	R/W
INP:CUTO:ETIM OUTP:CUTO:ETIM	numeric	NR3	Yes	Sets the elapsed time of the cutoff function.	R/W
INP:CUTO:ETIM:STAT OUTP:CUTO:ETIM:STAT	bool	bool	Yes	Enables or disables the cutoff function for the elapsed time.	R/W
INP:CUTO:VOLT OUTP:CUTO:VOLT	numeric	NR3	Yes	Sets the voltage drop of the cutoff function.	R/W
INP:CUTO:VOLT:STAT OUTP:CUTO:VOLT:STAT	bool	bool	Yes	Enables or disables the cutoff function for the voltage drop.	R/W
INP:EXT:LOG OUTP:EXT:LOG	POS|NEG	char	Yes	Sets the signal logic for external control input.	R/W
INP:MSYN OUTP:MSYN	bool			Synchronizes the load on/off operation on synchronized PLZ12005WH/PLZ20005WHs.	W
INP:MSYN:ACC OUTP:MSYN:ACC	bool	bool	Yes	Sets whether to accept load on/off sync signal (IMP:MSYN) input from other synchronized devices.	R/W
INP:PON:STAT OUTP:PON:STAT	RST|RCL0|AUTO	char		Sets the panel setting state at power-on.	R/W
INP:PROT:CLE OUTP:PROT:CLE				Clears the protection mode.	W
INP:PROT:WDOG OUTP:PROT:WDOG	bool	bool		Sets the watchdog protection function on/off.	R/W
INP:PROT:WDOG:DEL OUTP:PROT:WDOG:DEL	numeric	NR3		Sets the delay time of the watchdog protection function.	R/W

FETCh/READ/MEASure subsystem

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
FETC? READ? MEAS?		NR3		Queries the measured value at a single point.	R
FETC:CAP? READ:CAP? MEAS:CAP?		NR3		Queries the capacity (Ah) at a single point.	R
FETC:CURR? READ:CURR? MEAS:CURR?		NR3		Queries the current (A) at a single point.	R
FETC:ENER? READ:ENER? MEAS:ENER?		NR3		Queries the power (Wh) at a single point.	R
FETC:ETIM? READ:ETIM? MEAS:ETIM?		NR3		Queries the elapsed time (s) at a single point.	R
FETC:POW? READ:POW? MEAS:POW?		NR3		Queries the power (W) at a single point.	R
FETC:VOLT? READ:VOLT? MEAS:VOLT?		NR3		Queries the voltage (V) at a single point.	R

TRIGger subsystem

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
ABOR				Stops all the trigger functions.	W
ABOR:ACQ				Stops the measurement trigger function.	W
ABOR:PULS				Stops the pulse function.	W
ABOR:SINE				Stops the sine function.	W
ABOR:TRAN				Stops the sequence trigger function.	W
INIT:ACQ				Switches to measurement trigger wait state.	W
INIT:PULS				Executes the sine function.	W
INIT:SINE				Executes the pulse function.	W
INIT:TRAN:PROG				Switches to the sequence trigger wait state in the program selected by PROG.	W
TRIG:ACQ:COUN	numeric	NR1	Yes	Sets the number of times measurement values are to be recorded.	R/W
	INF	char			
TRIG:ACQ:DEL	numeric	NR3	Yes	Sets the delay time for applying measurement triggers.	R/W
TRIG:ACQ:MSYN				Starts measurement simultaneously on synchronized PLZ12005WH/PLZ20005WHs.	W
TRIG:ACQ:SOUR	char	char	Yes	Sets the measurement trigger source.	R/W
TRIG:ACQ:INT:STAT	bool	bool	Yes	Sets whether to measure at intervals when TRIG:ACQ:COUN is 2 or higher.	R/W
TRIG:ACQ:INT:TIME	numeric	NR3	Yes	Sets the measurement interval time when TRIG:ACQ:INT:STAT is set to ON.	R/W
TRIG:TRAN:DEL	numeric	NR3	Yes	Sets the delay time for applying sequence triggers.	R/W
TRIG:TRAN:EXEC?		char		Queries the execution state of the sequence trigger function and the pulse function.	R
TRIG:TRAN:MSYN				Starts a sequence simultaneously on synchronized PLZ12005WH/PLZ20005WHs.	W
TRIG:TRAN:RES				Pauses a sequence that is being executed.	W
TRIG:TRAN:SOUR	char	char	Yes	Sets the sequence trigger source.	R/W
TRIG:TRAN:SUSP				Resumes a sequence that has been paused.	W

DATA subsystem

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
DATA:BSIZ	numeric	NR1	Yes	Sets the buffer size of the data logger function.	R/W
DATA:FORM	char	char	Yes	Sets the response format to be used when referencing data in the data logger.	R/W
DATA:INT:GATE	NONE|LOAD_ON|PROG_RUN	char	Yes	Sets the integration operation time.	R/W
DATA:INT:GATE:ARES	bool	bool	Yes	Sets whether past integration is reset at the start of the integration operation.	R/W
DATA:INT:RES				Resets all the integrated data (capacity, energy, elapse time).	W
DATA:INT:STAR				Manually starts the integration operation.	W
DATA:INT:STOP				Manually stops the integration operation.	W
DATA:POIN?		NR1		Queries the number of measurement points registered in the data logger.	R
DATA:R?		NR3		Queries the measurement data registered in the data logger from oldest to youngest.	R

SYSTem subsystem

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
SYST:BEEP	bool	NR1		Collectively sets the beep sounds on/off.	R/W
SYST:BEEP:KEY	bool	bool		Sets whether a beep sound is generated in case of invalid operation.	R/W
SYST:BEEP:PROT	bool	bool		Sets whether a beep sound is generated when a protection is activated.	R/W
SYST:BEEP:SCPI	bool	bool		Sets whether a beep sound is generated in case of SCPI error.	R/W
SYST:COMM:RLST	LOC|REM|RWL	char		Sets the PWX to remote mode or local mode.	R/W
SYST:CONF:DIGITAL2:DIR	INP|OUTP	char		Sets I/O direction of DIGITAL2 signal.	R/W
SYST:CONF:MSYN:IND?	bool	NR1		Queries whether mutual synchronization connection is enabled or disabled.	R
SYST:CONF:RSEN	bool	bool		Sets remote sensing function on/off.	R/W
SYST:DATE	NR1	NR1		Sets the date.	R/W
SYST:ERR?		string		Reads error information.	R
SYST:ERR:COUN?		NR1		Queries the number of unread errors.	R
SYST:KLOC	bool	bool		Panel control lock.	R/W
SYST:KLOC:LEV	1|2|3	NR1		Sets the lock level of panel operation.	R/W
SYST:PASS	string			Enables a password-protected command.	W
SYST:PASS:CDIS	string			Disables a password-protected command.	W
SYST:PASS:NEW	string			Sets the password.	W
SYST:PASS:STAT?		NR1		Queries whether a password-protected command is valid or invalid.	R
SYST:SEC:IMM				Deletes the user data according to the NISPOM requirements and restores the factory default settings.	W
SYST:SSAV	bool	bool		Sets screen saver on/off.	R/W
SYST:SSAV:DEL	numeric	NR3		Sets the time until the screen saver starts.	R/W
SYST:TIME	NR1	NR1		Sets the time.	R/W
SYST:TIME:ADJ				Automatically adjusts the system clock.	W
SYST:TZON	string	string		Sets the time zone of the system clock.	R/W
SYST:TZON:CAT?		string		Queries all the time zone IDs that can be used.	R
SYST:VERS?		NRf		Queries the SCPI specification version that the PLZ12005WH/PLZ20005WH complies with.	R

STATus subsystem

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
STAT:OPER?		NR1		OPERation status register: event	R
STAT:OPER:COND?		NR1		OPERation status register: register condition	R
STAT:OPER:ENAB	NR1	NR1		OPERation status register: enable	R/W
STAT:OPER:PTR	NR1	NR1		OPERation status register: positive transition	R/W
STAT:OPER:NTR	NR1	NR1		OPERation status register: negative transition	R/W
STAT:QUES?		NR1		QUEStionable status register: event	R
STAT:QUES:COND?		NR1		QUEStionable status register: register condition	R
STAT:QUES:ENAB	NR1	NR1		QUEStionable status register: enable	R/W
STAT:QUES:PTR	NR1	NR1		QUEStionable status register: positive transition	R/W
STAT:QUES:NTR	NR1	NR1		QUEStionable status register: negative transition	R/W
STAT:PRES				Resets the status register.	W

Other subsystems

SCPI command		Response	*RST	Description	R/W
Program header	Parameter				
DISP:ETIM	bool	bool	Yes	Sets whether to display the elapsed time on the display.	R/W
DISP:CAP	bool	bool	Yes	Sets whether to display the current capacity on the display.	R/W
DISP:ENER	bool	bool	Yes	Sets whether to display the power capacity on the display.	R/W
HCOP:SDUM:DATA?		NRf		Retrieves the display screen capture.	R
MEM:REC	1|2|3			Recalls preset memory.	W
MEM:SAVE	1|2|3			Saves to preset memory.	W
SENS:APER	numeric	NR3	Yes	Sets the measurement time.	R/W

IEEE 488.2 common commands

IEEE488.2 Common command	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 manufacturer information.	R
*OPC		Generates an operation completion message in the event status register when the commands that are in standby have been processed.	R/W
*OPT?		Queries the optional interfaces that are installed in the PLZ12005WH/PLZ20005WH.	R
*PSC	bool	Sets whether to initialize *ESE and *SRE when the POWER switch is turned on.	R/W
*RCL	NR1	Recalls panel settings from the specified memory number.	
*RST		Resets the PLZ12005WH/PLZ20005WH.	W
*SAV	NR1	Saves the present 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 execution of subsequent commands or queries until all operations that are in standby have completed.	W