

Lists of Messages

SCPI command: Command name in the short form

*RST: Yes for commands that are affected by *RST

R/W: Query command (R)/set command (W).

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

FETCh | MEASure subsystem

SCPI Command		Setting		Default	Resp.	*RST	Description	R/W	†
Program header	Parameter		Unit						
FETC[:SCAL] MEAS[:SCAL]									
:VOLT			A		NR3		Queries the measured voltage output.	R	1
:CURR			V		NR3		Queries the measured current output.	R	1

MEMory subsystem

SCPI Command		Setting		Default	Resp.	*RST	Description	R/W	†
Program header	Parameter		Unit						
MEM									
:KLOCK	bool			ON	NR1		Sets the preset memory recall while locked.	R/W	3
:RCL	numeric	1 to 3					Recalls a preset memory.	W	3
:SAV	numeric	1 to 3					Saves to a preset memory.	W	3

OUTPut subsystem

SCPI Command		Setting		Default	Resp.	*RST	Description	R/W	†
Program header	Parameter		Unit						
OUTP									
[:STAT]	bool			OFF	NR1	Yes	Output on/off.	R/W	1
[:STAT]:TRIG	bool			OFF	NR1	Yes	Sets whether to turn the output on/off using a trigger.	R/W	3
:EXT	char	NORM INV		NORM	char	Yes	Sets the logic of the output on/off using external contact.	R/W	3
:PROT:CLE							Clears the alarm.	W	1
:PON:STAT	char	RST AUTO		RST	char	Yes	Output status at power-on.	W	3

SENSE subsystem

SCPI Command		Setting		Default	Resp.	*RST	Description	R/W	†
Program header	Parameter		Unit						
SENS:AVER:CLE							Clears the measured date.	W	3

SOURCE subsystem

SCPI Command		Setting		Default	Resp.	*RST	Description	R/W	†
Program header	Parameter		Unit						
[SOUR]									
:VOLT									
[:LEV][:IMM][:AMPL]	numeric	0 % to 105 % of the rated output voltage	V	0	NR3	Yes	Sets the voltage.	R/W	1
:EXT:SOUR	char	NONE VOLT RES IRES FVOL ^{*1}		NONE	char	Yes	Sets the CV control mode setting.	R/W	3
:FINE ^{*2}	NRf	-10000 to 10000		0		Yes	Sets the fine adjustment setting for voltage.	W	3
:LIM									
[:AMPL]			V		NR3	Yes	Queries the voltage limit setting.	R	3
:AUTO	bool			OFF	NR1	Yes	Enables/Disables the voltage limit setting.	R/W	3
:PROT									
[:LEV]	numeric	10 % to 111.5 % of the rated output voltage	V	111.5 % of the rated output voltage	NR3	Yes	Sets the OVP.	R/W	1
:TRIG	numeric	0 % to 105 % of the rated output voltage	V	0	NR3	Yes	Target voltage using a trigger.	R/W	1
:CURR									
[:LEV][:IMM][:AMPL]	numeric	0 % to 105 % of the rated output current	A	105 % of the rated output current	NR3	Yes	Sets the current.	R/W	1
:EXT:SOUR	char	NONE VOLT RES IRES FVOL ^{*1}		NONE	char	Yes	Sets the constant current control mode.	R/W	3
:FINE ^{*2}	NRf	-10000 to 10000		0		Yes	Sets the fine adjustment setting for current.	W	3
:LIM									
[:AMPL]			A		NR3		Queries the current setting limit.	R	3
:AUTO	bool			OFF	NR1	Yes	Enables/Disables the current setting limit.	R/W	3
:PROT									
[:LEV]	numeric	10 % to 111.5 % of the rated output current	A	111.5 % of the rated output current	NR3	Yes	Sets the OCP.	R/W	1
:TRIG	numeric	0 % to 105 % of the rated output current	A	105 % of the rated output current	NR3	Yes	Target current using a trigger.	R/W	1

*1. FVOL parameter is available for 8 kW type products only.

*2. The command is available for 8 kW type products only.



STATus subsystem

SCPI Command		Setting	Response	Description	R/W	†
Program header	Parameter					
STAT						
:OPER						
	[:EVEN]		NR1	Event.*1	R	1
	:COND		NR1	Register status.*1	R	1
	:ENAB	NR1	0 to 32767	Enable.*1	R/W	1
	:PTR	NR1	0 to 32767	Positive transition.*1	R/W	1
	:NTR	NR1	0 to 32767	Negative transition.*1	R/W	1
	:PRES			Resets the enable register.	W	1
:QUES						
	[:EVEN]		NR1	Event.*2	R	1
	:COND		NR1	Register status.*2	R	1
	:ENAB	NR1	0 to 32767	Enable.*2	R/W	1
	:PTR	NR1	0 to 32767	Positive transition.*2	R/W	1
	:NTR	NR1	0 to 32767	Negative transition.*2	R/W	1

*1. OPERation status register.

*2. QUEStionable status register.

SYSTEM subsystem

SCPI Command		Setting		Default	Resp.	*RST	Description	R/W	†
Program header	Parameter		Unit						
SYST									
:CONF									
:BTR									
	[:IMM]						Breaker trip.	W	3
	:PROT	bool		OFF	NR1	Yes	Turns breaker trip on/off when the OCP/OVP activates.	R/W	3
	:SHUT	bool		OFF	NR1	Yes	Turns the breaker trip on/off when the SD signal is applied.	R/W	3
	:PAR	NRf	1 to 5* ¹	1	NR1		Setting the number of units in Master-Slave Parallel Operation.	R/W	3
	:PST	char	NORM INV	NORM	char		Sets the status signal of the power on/off.	R/W	3
	:RSEN				NR1		Queries the sensing switch status.	R	3
	:MSL	char	MAST PAR	MAST	char		Sets the status during parallel operation.	R/W	3
	:MPR* ²	char	CV CC	CV	char		Sets the output-on startup state.	R/W	3
	:SPH* ³	bool		OFF	NR1		Sets the phase input mode.	R/W	3
	:TRAC	bool		OFF	NR1		Sets whether to display or hide the communication error.	R/W	3
	:ERR[:NEXT]?				string		Read the error information.	R	3
	:KLOC	bool			NR1		Panel operation lock.	R/W	1
	:LOC						Sets to local.	W	1
	:OPT				char		Queries the option interface board.	R	3
	:REM						Sets the operation to remote. Locks the panel keys except the LOCAL switch.	W	3
	:RWL						Sets the operation to remote. Locks the panel operation.	W	3
	:VERS						Queries the SCPI specification version with which the PAT complies.	R	1

*1. On the PAT850-9.4T, the settings are 1 | 2

*2. The command is available for 8 kW type products only.

*3. The command is available for 4 kW type products only.



TRIGger subsystem

SCPI Command		Setting		Default	Resp.	*RST	Description	R/W	†
Program header	Parameter		Unit						
ABOR							Aborts the operation of all sequences.	W	1
INIT									
[:IMM]									
	:NAME	char	TRAN OUTP ACQ				Sequence 1, 2, and 3: Starts the trigger function.	W	1
	:SEQ1						Sequence 1: Starts the voltage/current setting trigger function.	W	1
	:SEQ2						Sequence 2: Starts the output on/off delay trigger function.	W	1
	:SEQ3						Sequence 3: Starts the measurement trigger function.	W	1
:CONT									
	:NAME	char	ACQ			Yes	Sequence 3: Sets the auto continue mode.	R/W	1
		bool		OFF	NR1				
	:SEQ3	bool		OFF	NR1	Yes			
TRIG[SEQ[1]] TRIG[:TRAN]									
	[:IMM]						Sequence 1: Software trigger.	W	1
	:SOUR	char	IMM BUS		BUS	char	Yes	R/W	1
TRIG:SEQ2 TRIG:OUTP									
	[:IMM]						Sequence 2: Software trigger.	W	1
:DEL									
	:OFF	numeric	0.0 to 10.0	S	0.0	NR3	Yes	R/W	1
	:ON	numeric	0.0 to 10.0	S	0.0	NR3	Yes	R/W	3
	:SOUR	char	IMM BUS		BUS	char	Yes	R/W	3
TRIG:SEQ3 TRIG:ACQ									
	[:IMM]						Sequence 3: Software trigger.	W	1
	:SOUR	char	IMM BUS		IMM	char	Yes	R/W	1

IEEE488.2 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 identification string (manufacturer information).	R
*OPC		Causes the device to generate the operation complete message in the event status register when all pending selected device operations have been finished.	R/W
*OPT		Queries the hardware interface board that is installed.	R
*PSC	0 1	Initializes *ESE and *SRE.	R/W
*RST		Performs a device reset. Configures the PAT 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 device from executing subsequent commands or queries until the No Operation Pending flag becomes true.	W