

GPIB Command TSR2252 *EN

Temperatur Stress Routine

All message strings to and from the TSR2252 consist of ASCII characters.

- Numerical arguments are always sent or received in decimal format as a string of ASCII characters.
- Some numerical arguments consist of a series of binary flags. They are sent as a decimal number equal to the sum of the binary weights of each flag bit that is a "one."
- Commands with arguments must have a space between the command and the argument.
- Serial (RS-232C) program messages (strings) must be terminated with a line feed. GPIB program messages (strings) may be terminated with a line feed, by setting the EOI line, or both.
- In GPIB mode, response messages from the TSR2252 are terminated with a line feed character with the EOI line set. In Serial mode, response messages are terminated with a carriage return followed by a line feed.
- Program message unit separators ";" (semicolons) are required to delimit multiple commands or queries in a single program message (string).
- In serial mode, the (exclamation point) character acts as the device clear command. It is sent as a single character (no terminator) and should never otherwise appear in a message.

*IDN	Identification Query
COOL	COOL 1 – turn the compressor on; COOL 0 – turn the compressor off
COOL?	Read COOL on/off state
DSNS	Set the DUT sensor type. 1 -> T- Type; 2 -> K- Type; 0 -> reset DUT
DSNS?	Read the DUT sensor type
DUTM	DUTM 0 -- off (air control); DUTM 1 -- on (DUT control)
DUTM?	Read DUT mode on/off state
FLLE?	Read the main air flow lower limit
FLOW	FLOW 1 – on; FLOW 0 – off
FLOW?	Read the setting of FLOW
FLRE?	Read the measured main nozzle air flow rate, in scfm
FLRL?	Read the measured main nozzle air flow rate, in liters/sec
FLUE	Set the main nozzle air flow Boost in L/s 2-10L/s
FLUE?	Read the main nozzle air flow Boost in L/s 2-10L/s
FLML	Set the main nozzle air flow in L/s 2-10L/s
FLML?	Read the main nozzle air flow in L/s 2-10L/s
FLWR?	Read the measured main nozzle air flow rate
HDLK	HDLK 1 – head locked (prevented from moving) HDLK 0 – head can move up and down
HDLK?	Read the setting of HDLK
HEAD	HEAD 1 – put head down
HEAD?	Read the up/down state of the test head
LRNM	LRNM 0 – automatic tuning off
LRNM?	Read the setting of LRNM
RAMP	RAMP nn.n – where nn.n is 0 to 99,9 in 0,1 °C per minute steps
RAMP?	Read the setting of RAMP
SETP	Set the currently selected temperature. –99,9 to 225,0 °C
SETP?	Read the current temperature SETPoint
SOAK	Set the soak time for the currently selected 0 – 9999 seconds
SOAK?	Read the soak time for the currently selected
STIM	set the shutdown timer to shutdown the system after n minutes
TECR?	1 - SOAK TIME lapsed
TEMP?	Read the system temperature, in 0.1 °C increments
TMPA?	Read main air temperature, in 0.1 °C increments
TMPD?	Read DUT sensor temperature, in 0.1 °C increments
ULIM	Set the upper air temperature limit 25,0 to 225,0 °C
WNDW	Set the currently selected ULIMoint's temperature window 1 to 10 °C
WNDW?	Read the currently selected ULIMoint's temperature window

Command Processing Overview

- The System reads the message into a buffer until a Line Feed <LF> is received (or in GPIB mode, the EOI line is set).
- After the <LF> (or EOI) is received, the System begins to process the commands/queries in the message.
- The System will continue until all of the commands/queries in the message string are processed.
- During processing of the message, the System will not transmit data. In GPIB mode, the GPIB hardware handshake lines will prevent new data from being received. In Serial mode, because there is no hardware handshaking, new data will be received into the input buffer but will not be acted upon until processing of the current message is completed.
- When the entire message string has been processed, the System will transmit the response(s) (separated by semicolons if there was more than one query message unit in the string) to any queries.
- Although commands and queries are typically processed in less than 100 milliseconds, a GPIB bus or Serial Interface timeout interval of 3 seconds is recommended.

Command Examples

Command Description	Syntax From Host to System	System Returns
Read the current temperature.	TEMP?<LF>	25<LF>
Read the setpoint	SETP?<LF>	25 <LF>
Set Temperature	SETP 25,0	25,0 °C
Set upper limit	ULIM 225,0	225,0 °C

Main GPIB Screen

- GPIB Setup Screen
- USB Setup Screen
- RS232 Setup Screen
- TCP Setup Screen

