

Side-by-Side SCPI Command Comparison of the Agilent U2741A, 34405A, and 34410A/34411A Digital Multimeters

SCPI Command Comparison Table

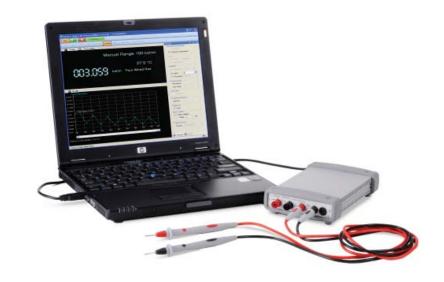
Introduction

The Agilent U2741A USB modular digital multimeter is the latest member of Agilent's digital multimeter (DMM) family, expanding Agilent's offerings in electronics measurement tools. It provides a broad range of measurement functions. The U2741A offer features such as DC voltage, DC current, true-RMS AC voltage and AC current, 2-wire and 4-wire resistance, continuity test, frequency, diode test, and temperature measurement functions designed to meet general industrial needs. It is rich in features. fast, accurate, reliable, and easy-touse.

SCPI command compatibility

Standard Commands for Programmable Instruments (SCPI) is an ASCII-based instrument command language designed for test and measurement instruments. The U2741A, 34405A, 34410A, and 34411A can be programmed using the SCPI command set. However, they differ in several SCPI commands.

This document shows a list of SCPI commands supported between the U2741A USB modular 5½ digit digital multimeter, the 34405A 5½ digit multimeter, and the 34410A/34411A 6½ digit multimeter.



Terms used

Throughout this document, we use the following shorthand terms when referring to the various products and product families:

- "U2741A" refers to the Agilent U2741A USB Modular 5½ Digit Digital Multimeter
- "34405A" refers to the Agilent 34405A 5½ Digit Digital Multimeter
- "34410A/34411A" refers to the Agilent 34410A and 34411A High Performance 6½ Digit Digital Multimeter

A check (\checkmark) denotes that the SCPI command/query is supported by the instrument. The SCPI commands/queries are sorted by their respective subsystems in ascending order.

For more detailed product information, and remote interface reference see "References" on page 14 for other relevant product literature.



SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
Unclassified				
ABORt		✓	✓	✓
INITiate[:IMMediate]		✓	✓	✓
OUTPut:TRIGger:SLOPe	<slope></slope>			✓
OUTPut:TRIGger:SLOPe?				✓
R?	[<max_count>]</max_count>			✓
READ?		✓	~	✓
ROUTe:TERMinals?			✓	✓
UNIT:TEMPerature	{C CEL F FAR K}	✓	~	✓
UNIT:TEMPerature?	{C F K}	V	✓	✓
IEEE-488.2 Common Commands				
*CLS		✓	✓	✓
*ESE	<value></value>	✓	✓	✓
*ESE?		✓	✓	✓
*ESR?		✓	✓	✓
*IDN?		✓	✓	✓
*LRN?				V
*OPC		✓	✓	V
*OPC?		✓	✓	V
*PSC			✓	✓
*PSC?			✓	✓
*RCL			✓	✓
*RST		V	✓	✓
*SAV			✓	V
*SRE	<value></value>	V	✓	V
*SRE?		✓	✓	✓
*STB?		V	✓	✓
*TRG		✓	✓	✓
*TST?		✓	✓	✓
*WAI			~	✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
CALCULATE Subsystem				
CALCulate:FUNCtion	{NULL DB DBM AVERage LIMit}		✓	✓
CALCulate:FUNCtion?			✓	✓
CALCulate:STATe	{OFF ON}		✓	✓
CALCulate:STATe?			✓	✓
CALCulate:LIMit:LOWer	{ <value> MINimum MAXimum}</value>		✓	✓
CALCulate:LIMit:LOWer?			✓	✓
CALCulate:LIMit:UPPer	{ <value> MINimum MAXimum}</value>		✓	✓
CALCulate:LIMit:UPPer?			✓	✓
CALCulate: AVERage: AVERage?			✓	✓
CALCulate:AVERage:CLEar?				✓
CALCulate:AVERage:COUNt?			V	✓
CALCulate:AVERage:MAXimum?			V	✓
CALCulate:AVERage:MINimum?			V	✓
CALCulate:AVERage:PTPeak?				V
CALCulate:AVERage:SDEViation?				✓
CALCulate:DB:REFerence	{ <value> MINimum MAXimum}</value>		V	✓
CALCulate:DB:REFerence?	{MINimum MAXimum}		V	✓
CALCulate:DBM:REFerence	{ <value> MINimum MAXimum}</value>		✓	✓
CALCulate:DBM:REFerence?	{MINimum MAXimum}		✓	✓
CALCulate:NULL:OFFSet	{ <value> MINimum MAXimum}</value>		V	✓
CALCulate:NULL:OFFSet?	{MINimum MAXimum}		V	✓
CALIBRATION Subsystem				
CALibration:COUNt?		V	·	·
CALibration:SECure:CODE	<new_code></new_code>	V	V	✓
CALibration:SECure:STATe	<mode>, <code></code></mode>	V	V	✓
CALibration:SECure:STATe?		✓	V	✓
CALibration:STRing	" <string>"</string>	V	V	✓
CALibration:STRing?		✓	V	✓
CALibration:VALue	<value></value>	✓	V	✓
CALibration:VALue?		✓	✓	✓
CALibration:STORe		V		✓
CALibration:LFRequency	line_freq>			✓
CALibration:LFRequency?				✓
CALibration:LFRequency:ACTual?				✓
CALibration[:ALL]?		✓	✓	✓
CALibration:ADC?		V		

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
CONFIGURE Subsystem				
CONFigure:CAPacitance	[{ <range> MIN MAX AUTO} [,{<resolution> MIN MAX DEF}]]</resolution></range>	✓	~	✓
CONFigure:CONTinuity		~	✓	~
CONFigure:CURRent:AC	[{ <range> MIN MAX AUTO} [,{<resolution> MIN MAX DEF}]]</resolution></range>	~	~	✓
CONFigure:CURRent[:DC]	[{ <range> MIN MAX AUTO} [,{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
CONFigure:DIODe		~	✓	~
CONFigure:FREQuency	[{ <range> MIN MAX DEF} [,{<resolution> MIN MAX DEF}]]</resolution></range>	~	~	✓
CONFigure:PERiod	[{ <range> MIN MAX DEF} [,{<resolution> MIN MAX DEF}]]</resolution></range>			✓
CONFigure:FRESistance	[{ <range> MIN MAX AUTO} [,{<resolution> MIN MAX DEF}]]</resolution></range>	✓		✓
CONFigure:RESistance	[{ <range> MIN MAX AUTO} [,{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
CONFigure:TEMPerature	[{ <pre>probe_type> DEF}[,{<type> DEF} [,1 [,{<resolution> MIN MAX DEF}]]]]</resolution></type></pre>	✓	✓	✓
CONFigure:SSI	{SLAVe NONE}, (@ <address_list>)}</address_list>	✓		
CONFigure:SSI?		✓		
CONFigure[:VOLTage]:AC	[{ <range> MIN MAX AUT0} [,{<resolution> MIN MAX DEF}]]</resolution></range>	~	~	✓
CONFigure[:VOLTage][:DC]	[{ <range> MIN MAX AUTO} [,{<resolution> MIN MAX DEF}]]</resolution></range>	~	✓	✓
CONFigure?		~	✓	~
DATA Subsystem				
DATA:COPY	NVMEM, RDG_STORE			✓
DATA:DATA?	NVMEM			✓
DATA:DELete	NVMEM			✓
DATA:LAST?				✓
DATA:POINts:EVENt:THReshold	<num_readings></num_readings>			✓
DATA:POINts:EVENt:THReshold?				✓
DATA:POINts?	[{RDG_STORE NVMEM}]			✓
DATA:REMove?	<num_readings></num_readings>			~

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
DISPLAY Subsystem				
DISPlay[:STATe]	<mode></mode>		✓	
DISPlay[:STATe]?			✓	
DISPlay[:WINDow[1 2][:STATe]]				✓
DISPlay[:WINDow[1 2]]:TEXT:CLEar				✓
DISPlay[:WINDow[1 2]]:TEXT[:DATA]	" <string>"</string>			~
DISPlay[:WINDow[1 2]]:TEXT[:DATA]?				✓
DISPlay[:WINDow[1 2]]:TEXT:FEED	" <feed>"</feed>			✓
DISPlay[:WINDow[1 2]]:TEXT:FEED?				✓
DISPlay:WINDow2:SELect	<value></value>		✓	
DISPlay:WINDow2:SELect?			✓	
DISPlay:WINDow[:STATe]	<mode></mode>		✓	
DISPlay:WINDow[:STATe]?			✓	
FETCH Subsystem				
FETCh?		✓	✓	✓
FETCh:CURRent:AC:PTPeak?				✓
FETCh:CURRent[:DC]:PEAK:MAXimum?				✓
FETCh:CURRent[:DC]:PEAK:MINimum?				✓
FETCh:CURRent[:DC]:PTPeak?				✓
FETCh:VOLTage:AC:PTPeak?				✓
FETCh:VOLTage[:DC]:PEAK:MAXimum?				✓
FETCh:VOLTage[:DC]:PEAK:MINimum?				✓
FETCh:VOLTage[:DC]:PTPeak?				✓
FORMAT Subsystem				
FORMat:BORDer	{NORMal SWAPped}			✓
FORMat:BORDer?				✓
FORMat[:DATA]	{ASCii REAL} [, <length>]</length>			✓
FORMat[:DATA]?				✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
MEASURE Subsystem				
MEASure:CAPacitance?	[{ <range> MIN MAX AUTO} [.{<resolution> MIN MAX DEF}]]</resolution></range>		✓	✓
MEASure:CONTinuity?		~	✓	~
MEASure:CURRent:AC?	[{ <range> MIN MAX AUTO} [.{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
MEASure:CURRent[:DC]?	[{ <range> MIN MAX AUTO} [.{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
MEASure:DIODe?		✓	✓	✓
MEASure:FREQuency?	[{ <range> MIN MAX DEF} [.{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
MEASure:PERiod?	[{ <range> MIN MAX DEF} [,{<resolution> MIN MAX DEF}]]</resolution></range>			✓
MEASuer:FRESistance?	[{ <range> MIN MAX AUTO} [.{<resolution> MIN MAX DEF}]]</resolution></range>	✓		✓
MEASure:RESistance?	[{ <range> MIN MAX AUTO} [.{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
MEASure:TEMPerature?	[{ <probe_type> DEF}[,{<type> DEF} [,1 [,{<resolution> MIN MAX DEF}]]]]</resolution></type></probe_type>	✓	✓	✓
MEASure[:VOLTage]:AC?	[{ <range> MIN MAX AUTO} [.{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
MEASure[:VOLTage][:DC]?	[{ <range> MIN MAX AUTO} [,{<resolution> MIN MAX DEF}]]</resolution></range>	✓	✓	✓
MEMORY Subsystem				
MEMory:NSTATe?				~
MEMory:STATe:CATalog?				✓
MEMory:STATe:DELete	{0 1 2 3 4}			✓
MEMory:STATe:DELete:ALL				✓
MEMory:STATe:NAME	{0 1 2 3 4} [, <name>]</name>			✓
MEMory:STATe:NAME?	{0 1 2 3 4}			✓
MEMory:STATe:RECall:AUTO	<mode></mode>		✓	✓
MEMory:STATe:RECall:AUTO?			✓	✓
MEMory:STATe:RECall:SELect	{0 1 2 3 4}			✓
MEMory:STATe:RECall:SELect?				✓
MEMory:STATe:STORe	<mode></mode>		V	
MEMory:STATe:STORe?			V	
MEMory:STATe:VALid	{0 1 2 3 4}			✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
SAMPLE Subsystem				
SAMPle:COUNt	{ <count> MIN MAX DEF}</count>			V
SAMPle:COUNt?	[{MIN MAX}]			V
SAMPle:COUNt:PRETrigger	{ <ptcount> MIN MAX DEF}</ptcount>			V
SAMPle:COUNt:PRETrigger?	[{MIN MAX}]			V
SAMPle:SOURce	{IMMediate TIMer}			V
SAMPle:SOURce?				V
SAMPle:TIMer	{ <interval> MIN MAX}</interval>			V
SAMPle:TIMer?	[{MIN MAX}]			V
SENSE Subsystem				
[SENSe:]VOLTage:AC:BANDwidth	{ <filter> MIN MAX DEF}</filter>			V
[SENSe:]VOLTage:AC:BANDwidth?	[{MIN MAX}]			✓
[SENSe:]VOLTage:AC:NULL[:STATe]	{ON OFF}			✓
[SENSe:]VOLTage:AC:NULL[:STATe]?				✓
[SENSe:]VOLTage:AC:NULL:VALue	{ <value> MIN MAX}</value>			✓
[SENSe:]VOLTage:AC:NULL:VALue?	[{MIN MAX}]			V
[SENSe:]VOLTage:AC:PEAK:STATe	{ON OFF}			✓
[SENSe:]VOLTage:AC:PEAK:STATe?				V
[SENSe:]VOLTage:AC:RANGe	{ <range> MIN MAX AUT0}</range>	V	V	
[SENSe:]VOLTage:AC:RANGe?		V	V	
[SENSe:]VOLTage:AC:RANGe[:UPPer]	{ <range> MIN MAX DEF}</range>			V
[SENSe:]VOLTage:AC:RANGe[:UPPer]?	[{MIN MAX}]			V
[SENSe:]VOLTage:AC:RANGe:AUTO	<mode></mode>	✓	V	V
[SENSe:]VOLTage:AC:RANGe:AUTO?		✓	V	V
[SENSe:]VOLTage:AC:RESolution	{ <resolution> MIN MAX DEF}</resolution>		V	
[SENSe:]VOLTage:AC:RESolution?			V	
[SENSe:]VOLTage[:DC]:APERture	{ <seconds> MIN MAX DEF}</seconds>			V
[SENSe:]VOLTage[:DC]:APERture?				V
[SENSe:]VOLTage[:DC]:APERture:ENABled	{ON OFF}			V
[SENSe:]VOLTage[:DC]:APERture:ENABled?				✓
[SENSe:]VOLTage[:DC]:IMPedance:AUTO	{OFF 0 0N 1}			V
[SENSe:]VOLTage[:DC]:IMPedance:AUTO?				V
[SENSe:]VOLTage[:DC]:NPLC	{ <plcs> MIN MAX DEF}</plcs>	✓		V
[SENSe:]VOLTage[:DC]:NPLC?		✓		V
[SENSe:]VOLTage[:DC]:NULL[:STATe]	{ON OFF}			V
[SENSe:]VOLTage[:DC]:NULL[:STATe]?				~
[SENSe:]VOLTage[:DC]:NULL:VALue	{ <value> MIN MAX}</value>			✓
[SENSe:]VOLTage[:DC]:NULL:VALue?	[{MIN MAX}]			✓
[SENSe:]VOLTage[:DC]:PEAK:STATe	{ON OFF}			✓
[SENSe:]VOLTage[:DC]:PEAK:STATe?				✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
SENSE Subsystem				
[SENSe:]VOLTage[:DC]:RANGe	{ <range> MIN MAX AUT0}</range>	✓	V	
[SENSe:]VOLTage[:DC]:RANGe?		✓	V	
[SENSe:]VOLTage[:DC]:RANGe:AUTO	<mode></mode>	✓	V	✓
[SENSe:]VOLTage[:DC]:RANGe:AUTO?		✓	✓	V
[SENSe:]VOLTage[:DC]:RANGe[:UPPer]	{OFF 0 ON 1}			V
[SENSe:]VOLTage[:DC]:RANGe[:UPPer]?				V
[SENSe:]VOLTage[:DC]:RESolution	{ <resolution> MIN MAX DEF}</resolution>	✓	✓	V
[SENSe:]VOLTage[:DC]:RESolution?		✓	✓	V
[SENSe:]VOLTage[:DC]:ZERO:AUTO	<mode></mode>	✓		V
[SENSe:]VOLTage[:DC]:ZERO:AUTO?		✓		V
[SENSe:]CAPacitance:NULL[:STATe]	{ON OFF}			✓
[SENSe:]CAPacitance:NULL[:STATe]?				✓
[SENSe:]CAPacitance:NULL:VALue	{ <value> MIN MAX}</value>			V
[SENSe:]CAPacitance:NULL:VALue?	[{MIN MAX}]			V
[SENSe:]CAPacitance:RANGe	{ <range> MIN MAX AUT0}</range>		✓	
[SENSe:]CAPacitance:RANGe?			✓	
[SENSe:]CAPacitance:RANGe:AUTO	<mode></mode>		V	✓
[SENSe:]CAPacitance:RANGe:AUTO?			V	✓
[SENSe:]CAPacitance:RANGe[:UPPer]	{ <range> MIN MAX DEF}</range>			✓
[SENSe:]CAPacitance:RANGe[:UPPer]?	[{MIN MAX}]			✓
[SENSe:]CURRent:AC:BANDwidth	{ <filter> MIN MAX DEF}</filter>			V
[SENSe:]CURRent:AC:BANDwidth?	[{MIN MAX}]			✓
[SENSe:]CURRent:AC:NULL[:STATe]	{0N 0FF}			✓
[SENSe:]CURRent:AC:NULL[:STATe]?				✓
[SENSe:]CURRent:AC:NULL:VALue	{ <value> MIN MAX}</value>			✓
[SENSe:]CURRent:AC:NULL:VALue?	[{MIN MAX}]			✓
[SENSe:]CURRent:AC:PEAK:STATe	{0N 0FF}			✓
[SENSe:]CURRent:AC:PEAK:STATe?				✓
[SENSe:]CURRent:AC:RANGe	{ <range> MIN MAX AUT0}</range>	✓	V	
[SENSe:]CURRent:AC:RANGe?		✓	V	
[SENSe:]CURRent:AC:RANGe:AUTO	<mode></mode>	✓	✓	✓
[SENSe:]CURRent:AC:RANGe:AUTO?		V	V	✓
[SENSe:]CURRent:AC:RANGe[:UPPer]	{ <range> MIN MAX DEF}</range>			✓
[SENSe:]CURRent:AC:RANGe[:UPPer]?	[{MIN MAX}]			✓
[SENSe:]CURRent:AC:RESolution	{ <resolution> MIN MAX DEF}</resolution>		✓	
[SENSe:]CURRent:AC:RESolution?			✓	
[SENSe:]CURRent[:DC]:APERture	{ <seconds> MIN MAX DEF}</seconds>			✓
[SENSe:]CURRent[:DC]:APERture?				✓
[SENSe:]CURRent[:DC]:APERture:ENABled	{ON OFF}			✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
SENSE Subsystem				
[SENSe:]CURRent[:DC]:APERture:ENABled?				✓
[SENSe:]CURRent[:DC]:NPLC	{ <plcs> MIN MAX DEF}</plcs>	V		✓
[SENSe:]CURRent[:DC]:NPLC?		V		✓
[SENSe:]CURRent[:DC]:NULL[:STATe]	{ON OFF}			✓
[SENSe:]CURRent[:DC]:NULL[:STATe]?				✓
[SENSe:]CURRent[:DC]:NULL:VALue	{ <value> MIN MAX}</value>			✓
[SENSe:]CURRent[:DC]:NULL:VALue?	[{MIN MAX}]			✓
[SENSe:]CURRent[:DC]:PEAK:STATe	{ON OFF}			✓
[SENSe:]CURRent[:DC]:PEAK:STATe?				✓
[SENSe:]CURRent[:DC]:RANGe		✓	V	
[SENSe:]CURRent[:DC]:RANGe?		✓	V	
[SENSe:]CURRent[:DC]:RANGe:AUTO	<mode></mode>	✓	V	✓
[SENSe:]CURRent[:DC]:RANGe:AUTO?		✓	V	✓
[SENSe:]CURRent[:DC]:RANGe[:UPPer]	{ <range> MIN MAX DEF}</range>			✓
[SENSe:]CURRent[:DC]:RANGe[:UPPer]?	[{MIN MAX}]			✓
[SENSe:]CURRent[:DC]:RESolution	{ <resolution> MIN MAX DEF}</resolution>	V	V	✓
[SENSe:]CURRent[:DC]:RESolution?		V	V	✓
[SENSe:]CURRent[:DC]:ZERO:AUTO	<mode></mode>	V		V
[SENSe:]CURRent[:DC]:ZERO:AUTO?		V		V
[SENSe:]FREQuency:APERture	{ <seconds> MIN MAX DEF}</seconds>	V		V
[SENSe:]FREQuency:APERture?		V		V
[SENSe:]FREQuency:NULL[:STATe]	{ON OFF}			V
[SENSe:]FREQuency:NULL[:STATe]?				V
[SENSe:]FREQuency:NULL:VALue	{ <value> MIN MAX}</value>			V
[SENSe:]FREQuency:NULL:VALue?	[{MIN MAX}]			V
[SENSe:]FREQuency:RANGe:LOWer	{ <filter> MIN MAX DEF}</filter>			V
[SENSe:]FREQuency:RANGe:LOWer?				V
[SENSe:]FREQuency:VOLTage:RANGe	{ <range> MIN MAX AUT0}</range>		✓	
[SENSe:]FREQuency:VOLTage:RANGe?			✓	
[SENSe:]FREQuency:VOLTage:RANGe:AUTO	<mode></mode>		✓	✓
[SENSe:]FREQuency:VOLTage:RANGe:AUTO?			✓	V
[SENSe:]PERiod:APERture	{ <seconds> MIN MAX DEF}</seconds>			V
[SENSe:]PERiod:APERture?	[{MIN MAX}]			✓
[SENSe:]PERiod:NULL[:STATe]	{ON OFF}			V
[SENSe:]PERiod:NULL[:STATe]?				✓
[SENSe:]PERiod:NULL:VALue	{ <value> MIN MAX}</value>			V
[SENSe:]PERiod:NULL:VALue?	[{MIN MAX}]			V
[SENSe:]PERiod:RANGe:LOWer	{ <filter> MIN MAX DEF}</filter>			V
[SENSe:]PERiod:RANGe:LOWer?	[{MIN MAX}]			✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
SENSE Subsystem				
[SENSe:]PERiod:VOLTage:RANGe:AUTO	<mode></mode>			V
[SENSe:]PERiod:VOLTage:RANGe:AUTO?				V
[SENSe:]PERiod:VOLTage:RANGe[:UPPer]	{ <voltage_range> MIN MAX DEF}</voltage_range>			V
[SENSe:]PERiod:VOLTage:RANGe[:UPPer]?	[{MIN MAX}]			V
[SENSe:]RESistance:APERture	{ <seconds> MIN MAX DEF}</seconds>			V
[SENSe:]RESistance:APERture?				V
[SENSe:]RESistance:APERture:ENABled	{ON OFF}			V
[SENSe:]RESistance:APERture:ENABled?				✓
[SENSe:]RESistance:NPLC	{ <plcs> MIN MAX DEF}</plcs>	✓		V
[SENSe:]RESistance:NPLC?		✓		V
[SENSe:]RESistance:NULL[:STATe]	{ON OFF}			V
[SENSe:]RESistance:NULL[:STATe]?				V
[SENSe:]RESistance:NULL:VALue	{ <value> MIN MAX}</value>			V
[SENSe:]RESistance:NULL:VALue?	[{MIN MAX}]			V
[SENSe:]RESistance:0COMpensated	<mode></mode>			V
[SENSe:]RESistance:0COMpensated?				V
[SENSe:]RESistance:RANGe	{ <range> MIN MAX AUT0}</range>	✓	V	
[SENSe:]RESistance:RANGe?		✓	✓	
[SENSe:]RESistance:RANGe:AUTO	<mode></mode>	✓	✓	V
[SENSe:]RESistance:RANGe:AUTO?		✓	✓	✓
[SENSe:]RESistance:RANGe[:UPPer]	{ <range> MIN MAX DEF}</range>			✓
[SENSe:]RESistance:RANGe[:UPPer]?				V
[SENSe:]RESistance:RESolution	{ <resolution> MIN MAX DEF}</resolution>	✓	✓	V
[SENSe:]RESistance:RESolution?	[{MIN MAX}]	✓	V	V
[SENSe:]RESistance:ZERO:AUTO	{OFF 0 0N 1}	✓		V
[SENSe:]RESistance:ZERO:AUTO?	<mode></mode>	✓		V
[SENSe:]FRESistance:APERture	{ <seconds> MIN MAX DEF}</seconds>			V
[SENSe:]FRESistance:APERture?				V
[SENSe:]FRESistance:APERture:ENABle	{ON OFF}			✓
[SENSe:]FRESistance:APERture:ENABle?				~
[SENSe:]FRESistance:NPLC	{ <plcs> MIN MAX DEF}</plcs>	✓		~
[SENSe:]FRESistance:NPLC?		✓		V
[SENSe:]FRESistance:NULL[:STATe]	{ON OFF}			✓
[SENSe:]FRESistance:NULL[:STATe]?				V
[SENSe:]FRESistance:NULL:VALue	{ <value> MIN MAX}</value>			V
[SENSe:]FRESistance:NULL:VALue?	[{MIN MAX}]			V
[SENSe:]FRESistance:OCOMpensated	<mode></mode>			V
[SENSe:]FRESistance:OCOMpensated?				V
[SENSe:]FRESistance:RANGe	{ <range> MIN MAX AUT0}</range>	✓		

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
SENSE Subsystem				
[SENSe:]FRESistance:RANGe?		V		
[SENSe:]FRESistance:RANGe:AUTO	<mode></mode>	V		✓
[SENSe:]FRESistance:RANGe:AUTO?		✓		✓
[SENSe:]FRESistance:RANGe[:UPPer]	{ <range> MIN MAX DEF}</range>			✓
[SENSe:]FRESistance:RANGe[:UPPer]?				✓
[SENSe:]FRESistance:RESolution	{ <resolution> MIN MAX DEF}</resolution>	V		✓
[SENSe:]FRESistance:RESolution?	[{MIN MAX}]	V		V
[SENSe:]TEMPerature:APERture	{ <seconds> MIN MAX DEF}</seconds>			✓
[SENSe:]TEMPerature:APERture?	[{MIN MAX}]			✓
[SENSe:]TEMPerature:APERture:ENABled	{ON OFF}			✓
[SENSe:]TEMPerature:APERture:ENABled?				✓
[SENSe:]TEMPerature:NPLC	{ <plcs> MIN MAX DEF}</plcs>			✓
[SENSe:]TEMPerature:NPLC?				V
[SENSe:]TEMPerature:NULL[:STATe]	{ON OFF}			V
[SENSe:]TEMPerature:NULL[:STATe]?				✓
[SENSe:]TEMPerature:NULL:VALue	{ <value> MIN MAX}</value>			✓
[SENSe:]TEMPerature:NULL:VALue?	[{MIN MAX}]			✓
[SENSe:]TEMPerature:TRANsducer:RTD: OCOMpensated?				✓
[SENSe:]TEMPerature:TRANsducer:RTD: RESistance[:REFerence]	{ <reference> MIN MAX DEF}</reference>			✓
[SENSe:]TEMPerature:TRANsducer:RTD: RESistance[:REFerence]?				✓
[SENSe:]TEMPerature:TRANsducer:RTD:TYPE	<type></type>			~
[SENSe:]TEMPerature:TRANsducer:RTD:TYPE?				~
[SENSe:]TEMPerature:TRANsducer: THERmistor:TYPE	<type></type>			✓
[SENSe:]TEMPerature:TRANsducer: THERmistor:TYPE?				✓
[SENSe:]TEMPerature:TRANsducer:TYPE	<type></type>		✓	✓
[SENSe:]TEMPerature:TRANsducer:TYPE?			✓	✓
[SENSe:]TEMPerature:ZER0:AUT0	{OFF 0 0N 1}	✓		✓
[SENSe:]TEMPerature:ZER0:AUT0?		✓		✓
[SENSe:]TEMPerature:RJUNction?		V		
[SENSe:]FUNCtion	<function></function>	✓	✓	
[SENSe:]FUNCtion?		V	✓	
[SENSe:]FUNCtion[:ON]	<function></function>			✓
[SENSe:]FUNCtion[:ON]?				✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
STATUS Subsystem				
STATus:OPERation:CONDition?		✓	V	V
STATus:OPERation:ENABle	<enable_value></enable_value>	✓	V	V
STATus:OPERation:ENABle?		✓	V	V
STATus:OPERation[:EVENt]?		✓	✓	V
STATus:PRESet		V	✓	~
STATus:QUEStionable:CONDition?		V	✓	~
STATus:QUEStionable:ENABle	<enable_value></enable_value>	V	V	V
STATus:QUEStionable:ENABle?		V	V	✓
STATus:QUEStionable[:EVENt]?		✓	✓	✓
SYSTEM Subsystem				
SYSTem:BEEPer:STATe	<mode></mode>		V	
SYSTem:BEEPer:STATe?			✓	
SYSTem:BEEPer[:IMMediate]			✓	
SYSTem:ERRor?			✓	
SYSTem:ERRor[:NEXT]?				✓
SYSTem:HELP?				✓
SYSTem:LANGuage	" <compatibility>"</compatibility>			✓
SYSTem:LANGuage?				✓
SYSTem:LFRequency	<value></value>	✓		
SYSTem:LFRequency?		✓		✓
SYSTem:LFRequency:ACTual?				V
SYSTem:LOCK:NAME?				V
SYSTem:L0CK:0WNer?				V
SYSTem:LOCK:RELease				V
SYSTem:LOCK:REQuest?				V
SYSTem:PRESet		✓	✓	V
SYSTem:SECurity:IMMediate				✓
SYSTem:VERSion?		✓	✓	✓
SYSTem:CDES		✓		
SYSTem:COMMunicate:ENABle	<mode>, <interface></interface></mode>			✓
SYSTem:COMMunicate:ENABle?	<interface></interface>			✓
SYSTem:COMMunicate:GPIB[:SELF]:ADDRess	{ <address>}</address>			✓
SYSTem:COMMunicate:GPIB[:SELF]:ADDRess?				✓
SYSTem:COMMunicate:LAN:AUT0ip[:STATe]	<mode></mode>			✓
SYSTem:COMMunicate:LAN:AUT0ip[:STATe]?				✓
SYSTem:COMMunicate:LAN:BSTatus?				✓
SYSTem:COMMunicate:LAN:CONTrol?				✓
SYSTem:COMMunicate:LAN:DDNS	<mode></mode>			✓
SYSTem:COMMunicate:LAN:DDNS?				✓

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
SYSTem:COMMunicate:LAN:DHCP	<mode></mode>			
SYSTem:COMMunicate:LAN:DHCP?	< mode >			<i>'</i>
SYSTem:COMMunicate:LAN:DNS	" <address>"</address>			
SYSTem:COMMunicate:LAN:DNS?	\duuiess/			
SYSTem:COMMunicate:LAN:DOMain	" <name>"</name>			
	<name></name>			· ·
SYSTem:COMMunicate:LAN:DOMain?	II de dalace NII			<u> </u>
SYSTem:COMMunicate:LAN:GATEway	" <address>"</address>			<u> </u>
SYSTem:COMMunicate:LAN:GATEway?				<u> </u>
SYSTem:COMMunicate:LAN:HISTory?				· ·
SYSTem:COMMunicate:LAN:HISTory:CLEar				✓
SYSTem:COMMunicate:LAN:HOSTname	" <name>"</name>			/
SYSTem:COMMunicate:LAN:HOSTname?				/
SYSTem:COMMunicate:LAN:IPADdress	" <address>"</address>			~
SYSTem:COMMunicate:LAN:IPADdress?				✓
SYSTem:COMMunicate:LAN:KEEPalive	{ <seconds> MIN MAX}</seconds>			/
SYSTem:COMMunicate:LAN:KEEPalive?	[{MIN MAX}]			~
SYSTem:COMMunicate:LAN:LIPaddress?				~
SYSTem:COMMunicate:LAN:MAC?				V
SYSTem:COMMunicate:LAN:MEDiasense	<mode></mode>			~
SYSTem:COMMunicate:LAN:MEDiasense?				✓
SYSTem:COMMunicate:LAN:NETBios	<mode></mode>			✓
SYSTem:COMMunicate:LAN:NETBios?				✓
SYSTem:COMMunicate:LAN:SMASk	" <mask>"</mask>			✓
SYSTem:COMMunicate:LAN:SMASk?				✓
SYSTem:COMMunicate:LAN:TELNet:PROMpt	" <string>"</string>			✓
SYSTem:COMMunicate:LAN:TELNet:PROMpt?				✓
SYSTem:COMMunicate:LAN:TELNet: WMESsage	" <string>"</string>			✓
SYSTem:COMMunicate:LAN:TELNet: WMESsage?				~

SCPI Command/Query	Parameter	U2741A	34405A	34410A/ 34411A
TRIGGER Subsystem				
TRIGger:COUNt	{ <count> MIN MAX DEF INFinity}</count>			✓
TRIGger:COUNt?				✓
TRIGger:DELay	{ <seconds> MIN MAX DEF}</seconds>			✓
TRIGger:DELay?				✓
TRIGger:DELay:AUTO	<mode></mode>			✓
TRIGger:DELay:AUTO?				✓
TRIGger:LEVel	{ <level> MIN MAX DEF}</level>			✓
TRIGger:LEVel?				✓
TRIGger:SLOPe	<slope></slope>			✓
TRIGger:SLOPe?				✓
TRIGger:SOURce	<source/>	✓	✓	✓
TRIGger:SOURce?		✓	✓	✓

References

The following Agilent product literatures can help you select the best digital multimeter for your application:

- The Agilent U2741A USB Modular 5.5 Digits Digital Multimeter User's Guide, U2741-90011
 - See also the Agilent U2741A USB Modular 5.5 Digits Digital Multimeter Programmer's Reference Guide
- The Agilent 34405A 5½ Digit Multimeter User's and Service Guide, 34405-91000
 - See also the Agilent 34405A 5½ Digit Multimeter Programmer's Reference Help File
- The Agilent 34410A/11A 6½ Digit Multimeter User's Guide, 34410-90001
 - See also the Agilent 34410A/11A 6½ Digit Multimeter Programmer's Reference Help File

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Revised: October 1, 2008

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