

NEW! DST610 • DST611 • DST620 • DST621

Digital Thermometers with 2 Independent RTD's

Four **NEW!** models of the **Wahl DST600 Series RTD Thermometer** are now available with 2 Independent RTD's for use with a controller or chart recorder.

Direct Access RTD Output

- **DST610** - DST600 meter mounted in a dual port enclosure with a second RTD wired to an internal terminal block. Users access the isolated second RTD via a 1/2" NPT-Female connector. User connection can be 2, 3, or 4 wire.
- **DST611** - DST600 meter mounted in a dual port enclosure with a second RTD wired to an internal terminal block. A Turck 4 pin connector is provided on the second port for watertight access. A mating connector or cable assembly (available from Wahl) is used to provide access to the second RTD. User connection can be 2, 3, or 4 wire.

4-20mA Transmitter Output

- **DST620** - DST600 meter mounted in a dual port enclosure with a second RTD wired to an internal 4-20mA programmable transmitter. Users access the 4-20mA transmitter via a 1/2" NPT-Female connector.
- **DST621** - DST600 meter mounted in a dual port enclosure with a second RTD wired to an internal 4-20mA programmable transmitter. A Turck 4-pin connector is provided on the second port for watertight access. A mating connector or cable assembly (available from Wahl) is used to provide access to the 4-20mA transmitter.



Wahl DST600 Series thermometer system being tested in the calibration lab of a major food processor, against two certified references.



For ordering assistance for all DST600 Series Meters
please call Customer Service at 1-800-421-2853

PALMER Wahl
INSTRUMENTATION GROUP

Continued Innovation Since 1836
ISO9001:2008 CERTIFIED

Complete Calibration Services Available

DST610 • DST620 Series Meter Specifications

Model	DST610	DST611	DST620	DST621
	RTD Meter with Local Display and Isolated Second RTD Sensor			
Isolated Secondary Sensor	Internal Terminal Block		4-20mA Transmitter	
	No Connector	Turck 4 pin Connector	No Connector	Turck 4 pin Connector
DISPLAY SPECIFICATIONS				
Meter Range / Scale	-50° to 500°F (-45.5° to 260°C) / User Selectable for °F or °C			
Meter Accuracy	± 0.1°F/C, over 1-year period (@ Tamb = 23°C ± 5°C)			
Meter and Probe Accuracy	Temp ≤ 300°F (148.8°C) = ± 0.3°F (± 0.2°C), Temp > 300°F (148.8°C) = ± 0.25% of reading			
Display	1.0" 4-digit LCD display with icons for °F, °C and Low Battery, Readable up to 30 ft.			
Display Resolution	0.1°F/C			
Sample/Display Rate	2 seconds standard, adjustable in .25 second intervals from .25 to 10 seconds			
Ambient Operating Environment	-40° to 158°F (-40° to 70°C) 10% to 100% RH non-condensing			
Ambient Temperature Coefficient	Maximum of 0.003%/°C over Ambient Operating Temperature Range from 23°C ± 5°C			
Sensor/Probe	<ul style="list-style-type: none"> • Sensor - 4-wire RTD, R0 = 100Ω, Alpha = 0.00385 Ω/Ω/°C w/ serial ID chip • Remote Probes (IP68 connection system) • Rigid Stem Probes • 304 or 316L Stainless Steel Probe • Sanitary Fittings (3A Sanitary Std 74-05) • Adjustable Angle Stem Probes • Models 610, 611, 620, 621 - 3/8" & 1/2" OD Shank & Tapered Bulbs only 			
Sensor Cables	PVC insulation, shielded, 105°C rating			
Power	One Lithium Thionyl Chloride "C" Battery, User Replaceable			
Battery Life	2 years nominal at 2 second update interval			
SECONDARY RTD SPECIFICATIONS				
RO	100 ohms per DIN EN 60751		100 ohms per DIN EN 60751	
Accuracy	Class A per DIN EN 60751		Class A per DIN EN 60751	
Temperature Coefficient	TCR = 3850 ppm/k		TCR = 3850 ppm/k	
Connection	Factory wired for 4-wire, user selectable 2, 3 or 4 wire		4-wire	
Self-Heating	0.4 K/mW at 0°C		NA	NA
Measuring Current	0.3 to 1.0 mA, self-heating must be considered		NA	NA
Terminal Block Type	Euro Style		NA	NA
Maximum Wire Size	10 AWG		NA	NA
TRANSMITTER SPECIFICATIONS				
Programming	NA	NA	PC Programming*	
Power Supply Requirements	NA	NA	10 to 35 Volts DC	
Range	NA	NA	-58° to 500°F (-50° to 260°C)	
Accuracy	NA	NA	Greater of ± 0.4°F or 0.1% ± (0.2°C or 0.1%)	
Fault Monitoring	NA	NA	Programmable High (> 21.6 mA), Programmable Low (< 3.5 mA)	
Enclosure	Stainless Steel & Polycarbonate (NEMA 4X)			
Dimensions/Weight	5.3" W x 4.3" H x 2.7" D (13.5 x 10.9 x 6.9 cm) / 2 lbs. (1kg)			

*Factory Programmable or optional Cable required. Specifications subject to change without notice.



WAHL DST610, DST611, DST620, DST621 METER & PROBE ORDERING GUIDE

Code	Step 1 - order Digi-Stem DST610, DST611, DST620, or DST621 Series RTD Meter (NIST Certificate included)							
DST610	Digi-Stem RTD Meter, Terminal Block, No Connector, LCD, Battery Powered Display, ("C" Batt incl) -50° to 500°F (-45.5° to 260°C)							
DST610NB ¹	Digi-Stem RTD Meter, (No Battery included). Requires purchase of "C" battery from local supplier							
DST611	Digi-Stem RTD Meter, Terminal Block, with Connector, LCD, Batt Powered Display, ("C" Batt incl) -50° to 500°F (-45.5° to 260°C)							
DST611NB ¹	Digi-Stem RTD Meter, (No Battery included). Requires purchase of "C" battery from local supplier							
DST620	Digi-Stem RTD Meter, Transmitter, No Connector, LCD, Battery Powered Display, ("C" Batt incl) -50° to 500°F (-45.5° to 260°C)							
DST620NB ¹	Digi-Stem RTD Meter, (No Battery included). Requires purchase of "C" battery from local supplier							
DST621	Digi-Stem RTD Meter, Transmitter, with Connector, LCD, Battery Powered Display, ("C" Batt incl) -50° to 500°F (-45.5° to 260°C)							
DST621NB ¹	Digi-Stem RTD Meter, (No Battery included). Requires purchase of "C" battery from local supplier							
I ¹	Digi-Stem RTD Meter, LCD, International ("AA" Battery included)(add "I" to end of model number)							
Code		Step 2 - order RTD Probe by inserting correct codes for desired probe in white boxes at bottom of form						
DST6D		DST610, DST611, DST620, DST621 RTD Probe						
Code		Process Connections (Select One)			* If choosing item with No Charge, please check line to select			
01		1/2" NPT Fitting						
02		3/4" NPT Fitting						
03		1-1/2" Diameter, 3-A Sanitary Standard 74-05; Stem Type Code "2", Welded only; Material 2, 316L SS/450°F only						
04		2" Diameter, 3-A Sanitary Standard 74-05; Stem Type Code "2", Welded only; Material 2, 316L SS/450°F only						
05		2-1/2" Diameter, 3-A Sanitary Standard 74-05; Stem Type Code "2", Welded only; Material 2, 316L SS/450°F only						
06		3" Diameter, 3-A Sanitary Standard 74-05; Stem Type Code "2", Welded only; Material 2, 316L SS/450°F only						
07		1-1/4" x 18 NEF2 Swivel Nut Fitting						
08		1/2" NPSM Swivel Nut Fitting						
09		Unthreaded Transition Fitting						
Code		Mounting Style (Select One) For Back(B), Left(L) or Right Side(R) Mount specify Code B, & add #13146						
A		Adjustable Angle (Not available on Remote Stems)						
B		Rigid - (Bottom Connected)					N/C	_____*
C		Remote (Mounting Bracket not included)						
Code		Stem Type (Select One)						
2		Welded					N/C	_____*
3		Spring Loaded - NA					NA	NA
Code		Stem Material/Construction (Select One)						
1		304 SS, Temperature Rating 400°F (204°C)					N/C	_____*
2		316L SS, Temperature Rating 400°F (204°C) (Note: not available with Stem Dia Code "3")						
Code		Stem Diameter (Select One)						
1		1/4" Diameter - minimum stem length of 3" required					N/C	_____*
2		3/8" Diameter						
3		5/8" Stem, 7/16" Tapered Bulb, (Process Conn "07" only, Stem Material Code "1" only, Standard Stem Lengths: 3.5", 6", 8", 9", 12", other lengths available on request)						
4		1/2" Diameter, One Piece Construction						
Code		Stem Lengths (Specify)						
01X-12X		1" to 12" Length in inches - 01X = 1 in, 02X = 2 in, 03X = 3 in, etc. For fractional lengths substitute X with: A = 1/4", B = 1/2", C = 3/4", Example: 03B = 3-1/2". Specify exact length desired: _____					N/C	_____*
13X-72X		13" to 72" Length in inches. For fractional lengths substitute X with: A = 1/4", B = 1/2", C = 3/4", Example: 13B = 13-1/2". Specify length: _____					\$/in	#_____
Stop here if ordering Adjustable Angle or Rigid Probe.				If ordering Remote Probe continue with options on next page.				
Meter	Probe	Adjustable Angle & Rigid Probe			* If choosing item with No Charge, please check line to select.			
DST6D____	DST6D							

¹ DST Meters come standard with a "C" cell battery, ready for ground shipment in the contiguous 48 states and some areas of Canada. For air shipments, either an "I" model with a "AA" battery, or "NB" model with no battery, is required to avoid additional charges in compliance with transportation regulations regarding "C" cell lithium metal batteries. Specify on order form.

Insert Model Number Code in white boxes below to construct Part Number for product desired, and carry over to next page.



Wahl DST610, DST611, DST620, DST621 Ordering Guide

WAHL DST610, DST611, DST620, DST621 METER & PROBE ORDERING GUIDE

If ordering a Remote Probe continue with options below.

Code Step 3 - Meter Connection - where cable attaches to Digi-Stem Meter (Select One)			
1	Fixed - NA		NA NA
2	Quick Disconnect - Straight Connection (Cable attached via IP68 rated TURCK 10-pin plug & receptacle)		
3	Quick Disconnect - 90° Connection (Cable attached via IP68 rated TURCK 10-pin plug & receptacle) (check Lead Time)		
Code	Cable Type		
1	PVC, Temperature Rating 221°F (105°C)		N/C STD
Code	Cable Length - 10-Pin Connector		
002	2 meters (6.5 feet)	#12380-XXX for Quick Disconnect on both ends #12381-XXX for Quick Disconnect on Meter end only #12382-XXX for Quick Disconnect on Probe end only	
004	4 meters (13.1 feet)		
006	6 meters (19.7 feet)		
008	8 meters (26.3 feet)		
010	10 meters (32.8 feet)		
011-200	011 = 11 meters, etc. up to 200 meters. Add \$ per meter, Specify exact length desired: _____		
Code Probe Connection - point where cable attaches to probe fitting (Select One)			
1	Fixed - NA		NA NA
2	Quick Disconnect - Straight Connection (Cable attached via IP68 rated TURCK plug & receptacle) For Replacement Cable only, add Suffix "C" ¹ For Replacement Probe only, add Suffix "P" ²		
3	Quick Disconnect - 90° Connection (Cable attached via IP68 rated TURCK plug & receptacle) For Replacement Cable only, add Suffix "C" ¹ For Replacement Probe only, add Suffix "P" ²		
Remote Probe Ordering Information		¹ Determine Part Number with Codes on pgs 2 & 3. Determine Price using Codes on pg 3. ² Determine Part Number with Codes on pgs 2 & 3. Determine Price using Codes on pg 2.	
Remember to include RTD probe number from previous page and combine with remote probe number from this page to obtain final part number.			

Insert Final Part Number below:

Meter	Probe	Adjustable Angle and Rigid Probe Ordering Information (from previous page)				Remote Probe Ordering Information (from above)			
DST6_____	DST6D								

WAHL DST610 SERIES OPTIONAL ACCESSORIES ORDERING GUIDE

Step 4 - order DST600 Series Software and Accessories		Price	Add
DSTCAL	DST600 Series Calibration Software Kit (USB Cable, DST/USB Interface Module, and Digi-Stem Serial Interface Cable)		
12380-002	DST600 Series Interconnect Calibration Cable, 2 meter length - 10 Conductor		
12075-XX	DST611 & DST621 Optional Connecting Cables or Connectors - Call Customer Service for information		
DST600 Series Meter Accessories and NIST Traceable Certificate of Conformance			
DSA3030	Wall Mount Bracket (for Remote Mount units)		
DSA3031	Wall Mount Bracket (for Remote Mount units) with Grounding Lug		
DSA3032	Security Screw Kit (Screws, washers, security wire seal, instructions. Installed when purchased with meter)		
DSA3033	Security Wire Seals, 10/pack, Toolless, 8", SS Wire		
DSA3062	Spare "C" size Lithium Thionyl Chloride Battery		
12234-03	Spare "AA" size Lithium Thionyl Chloride Battery for "I" versions		
DS-M	Calibration and Firmware Upgrades ²		
DST6NIST	NIST Traceable Certificate of Conformance of System & Firmware Upgrades ² Std Set Test Points(New/Subsequent)		
DST6NIST-1	NIST Traceable Certificate of Conformance of System & Firmware Upgrades ² User Specified Test Points(New/Subsequent)		
	Add \$30.00 per User Specified Test Point.		
DST-6XNIST	NIST Traceable Certificate of Conformance of Transmitter Unit/System/Firmware Upgrades ²		
13146	90 Degree Elbow ³ for Fixed units, Specify Back Connection(B), Left(L) or Right Side(R) Mount		

² Upgrades if applicable, are included in price.

³ For Back, Left, or Right Side Mounting Style specify Code B-Rigid, and add #13146 - 90° Elbow accessory, and specify as shown above.

Prices and Specifications are subject to change without notice