

Низкотемпературные калибраторы с сухим блоком NICAL, МТС, Н, НС

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231	Калининград (4012)72-03-81	Омск (3812)21-46-40	Сыктывкар (8212)25-95-17
Ангарск (3955)60-70-56	Калуга (4842)92-23-67	Орел (4862)44-53-42	Тамбов (4752)50-40-97
Архангельск (8182)63-90-72	Кемерово (3842)65-04-62	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Астрахань (8512)99-46-04	Киров (8332)68-02-04	Пенза (8412)22-31-16	Тольятти (8482)63-91-07
Барнаул (3852)73-04-60	Коломна (4966)23-41-49	Петрозаводск (8142)55-98-37	Томск (3822)98-41-53
Белгород (4722)40-23-64	Кострома (4942)77-07-48	Псков (8112)59-10-37	Тула (4872)33-79-87
Благовещенск (4162)22-76-07	Краснодар (861)203-40-90	Пермь (342)205-81-47	Тюмень (3452)66-21-18
Брянск (4832)59-03-52	Красноярск (391)204-63-61	Ростов-на-Дону (863)308-18-15	Ульяновск (8422)24-23-59
Владивосток (423)249-28-31	Курск (4712)77-13-04	Рязань (4912)46-61-64	Улан-Удэ (3012)59-97-51
Владикавказ (8672)28-90-48	Курган (3522)50-90-47	Самара (846)206-03-16	Уфа (347)229-48-12
Владимир (4922)49-43-18	Липецк (4742)52-20-81	Саранск (8342)22-96-24	Хабаровск (4212)92-98-04
Волгоград (844)278-03-48	Магнитогорск (3519)55-03-13	Санкт-Петербург (812)309-46-40	Чебоксары (8352)28-53-07
Вологда (8172)26-41-59	Москва (495)268-04-70	Саратов (845)249-38-78	Челябинск (351)202-03-61
Воронеж (473)204-51-73	Мурманск (8152)59-64-93	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
Екатеринбург (343)384-55-89	Набережные Челны (8552)20-53-41	Симферополь (3652)67-13-56	Чита (3022)38-34-83
Иваново (4932)77-34-06	Нижний Новгород (831)429-08-12	Смоленск (4812)29-41-54	Якутск (4112)23-90-97
Ижевск (3412)26-03-58	Новокузнецк (3843)20-46-81	Сочи (862)225-72-31	Ярославль (4852)69-52-93
Иркутск (395)279-98-46	Ноябрьск (3496)41-32-12	Ставрополь (8652)20-65-13	
Казань (843)206-01-48	Новосибирск (383)227-86-73	Сургут (3462)77-98-35	
Россия +7(495)268-04-70	Киргизия +996(312)-96-26-47	Казахстан +7(7172)727-132	

Dry Block Temperature Calibrator

Portable/Benchtop

NICAL Series

Precision Dry Block Calibrator with Multihole Interchangeable Thermowells

Ideal for quick / fast Site Calibration of RTDs / TCs / Bi-Metal Thermometers, Temperature Switches / Indicators etc. in Industrial & Marine Applications

Covering Wide Temperature Ranges : -30°C to 1200°C (NICAL 50 / 650 / 1200)

Measuring Accuracy : $\pm 0.025\%$ of rdg.

High Accuracy, Resolution & Stability with Measurement Capability for mV / V / mA, Resistance TC (ISA Types : J, K, R, S, N, B, T), RTD (Pt100, Pt200, Pt500, Pt1000 : IEC Standard) Signals

Full color display makes user easy to read.

The main temperature indications are SET, READ, UUT (Unit Under Test), Stability Status etc.

Inbuilt Readout for PRT

SALIENT FEATURES

- Informative Color Display with feather touch
- Heavy Duty Portable / Bench-top Model
- Rugged Field Use & for Calibration at Site
- Auto-tune PID Control
- Stability Indicator
- Switch Test facility
- Fast and Reliable
- Improved Accuracy, Resolution & Stability
- Interchangeable Thermowell Inserts, Single / Multihole



SPECIFICATIONS

MODEL	NICAL 50	NICAL 650	NICAL 1200
Operating Range	-30°C to 140°C	50°C to 650°C	150°C to 1200°C
Resolution	0.01°C	0.01°C	0.1°C
Accuracy	$\pm 0.2^\circ\text{C}$	$\pm 0.4^\circ\text{C}$	$\pm 2^\circ\text{C}$
Stability	$\pm 0.02^\circ\text{C}$	$\pm 0.04^\circ\text{C}$	$\pm 0.2^\circ\text{C}$
Radial Uniformity	$\pm 0.02^\circ\text{C}$	$\pm 0.04^\circ\text{C}$	$\pm 0.2^\circ\text{C}$
Axial uniformity	$\pm 0.2^\circ\text{C}$ (40 mm)	$\pm 0.4^\circ\text{C}$ (40 mm)	$\pm 0.6^\circ\text{C}$ (20 mm)
Heating Time	33 to 140°C -- 20 min	50 to 650°C---- 30min	200 to 1200°C----1.5h
Cooling Time	33 to -30°C -- 25 min	650 to 100°C----75min	1200 to 200°C----3h
Time to Stability (typical)	7 min	15 min	15 min
Well Diameter x Depth	Ø30mm x 150mm	Ø30mm x 150mm	Ø30mm x 105 mm
Weight	9 Kg	11 Kg	12.6 Kg
Size (L x D x H)	160 x 365 x 450 mm		
Computer Interface	USB Interface		
Mains Power	230V AC 50HZ - Optional 115V AC , 60HZ		

(P.T.O.)

Technical Datasheet

MEASUREMENT : RANGE, RESOLUTION & ACCURACY

Type	Range	Resolution	Accuracy (% of reading)
mV (Low)	0 to 200	0.001	$\pm(0.025\%+2\mu\text{V})$
mV (High)	0 to 2000	0.01	$\pm(0.025\%+10\mu\text{V})$
Volts	0 to 20	0.0001	$\pm(0.025\%+0.08\text{mV})$
mA	0 to 25	0.0001	$\pm(0.025\%+0.4\mu\text{A})$
Ohms	0 to 500	0.001	$\pm(0.025\%+12\text{m}\Omega)$
KOhms	0 to 5	0.00001	$\pm(0.025\%+120\text{m}\Omega)$
RTD Pt100	-100 to 800	0.01	$\pm(0.025\%+0.1^\circ\text{C})$
RTD Pt200	-100 to 600	0.01	$\pm(0.025\%+0.15^\circ\text{C})$
RTD Pt500	-100 to 530	0.01	$\pm(0.025\%+0.1^\circ\text{C})$
RTD Pt1000	-100 to 650	0.01	$\pm(0.025\%+0.1^\circ\text{C})$

Type	Range	Resolution	Accuracy (% of reading)
TC Type J	-100 to 1200	0.1	$\pm(0.025\%+0.1^\circ\text{C})$
TC Type K	-60 to 1260	0.1	$\pm(0.025\%+0.1^\circ\text{C})$
TC Type R	150 to 1700	0.1	$\pm(0.025\%+0.2^\circ\text{C})$
TC Type S	170 to 1700	0.1	$\pm(0.025\%+0.2^\circ\text{C})$
TC Type N	0 to 1300	0.1	$\pm(0.025\%+0.1^\circ\text{C})$
TC Type B	920 to 1820	0.1	$\pm(0.025\%+0.2^\circ\text{C})$
TC Type T	0 to 400	0.1	$\pm(0.025\%+0.1^\circ\text{C})$

CALIBRATION SOFTWARE

- The NICAL Series Dry Block Calibrator is supplied with Nagman calibration software NICAL
- All calibrations can be documented with a certificate, given that the NICAL Series Dry block Calibrator is controlled from a PC.
- Auto calibration
- Semi-automatic / Manual
- When the calibrator has reached the desired temperature and stability it will prompt you to type in the UUT temperature.



STANDARD INCLUSIONS

- Basic Instrument
- Test Leads
- Mains Cable
- Multi hole Insertion Tubes (to suit 2 x 6 mm & 1 x 8 mm probes)
- Tool for Insertion Tubes
- Spare Fuses
- "NICAL" Calibration Software
- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards
- Instruction Manual
- Carrying Case

OPTIONAL

- Additional Thermo wells/Insertion Tubes & Multi hole - Contact us
- Reference Indicator (Accuracy $\pm 0.015\%$ Rdg.) & Reference Sensor - Contact us

Universal Dry Block Low Temperature Calibrator

Portable/Benchtop

Precision Dry Block Calibrator with Interchangeable Thermowells

Ideal for quick / fast Site Calibration of RTDs / Bi-Metal Thermometers, Temperature Switches / Indicators etc. in Industrial & Marine Applications

High Accuracy, Resolution & Stability with Measurement Capability for mV / V / mA, Resistance TC (ISA Types J, K, R, S, N, B, T), RTD (Pt100:IEC Standard) Signals

SALIENT FEATURES

Advanced – Micro-controller based Technology

Heavy Duty Portable / Bench-top Model

High Accuracy, Resolution & Stability

Fast & heat cooling

128 x 64 Graphic Display

Measurement Capability for TC, RTD, mV/mA/V & Resistance Signals

Touch Membrane Keypad

Switch Test Contact Measurement

Interchangeable Single hole Thermowell Inserts

Computer Interface & Calibration Software



SPECIFICATIONS

Range	50°C to 350°C			
Resolution	0.1°C			
Accuracy	±0.4°C			
Stability	±0.05°C			
Stabilisation Time	20 Minutes			
Temperature Readout	°C / °F Selectable			
Well Diameter	30 mm			
Immersion Depth	110 mm			
Heating Time (Ambient to max.)	20 Minutes approx.			
Cooling Time (Max. to 100°C)	33 Minutes approx.			
Switch Test facility	Provided			
Interchangeable Thermowells	Single hole to suit 1/4" & 1/2" Probes			
Housing / Mounting	Bench-top			
Power Supply	230V AC, 50 Hz			
Instrument Dimensions (L x D x H)	160 x 365 x 350 mm			
Instrument Weight (approx.)	8 Kg.			
Measurement Capability	Thermocouples	ISA Types J, K, R, S, N, B & T	RTD	Pt100 IEC Std.
	mA	0 to 25 mA	mV	0 to 100 / 1000 mV
	Volt	0 to 10 V	Resistance	0 to 500 / 3.5 KOhm

MEASUREMENT : RANGE, RESOLUTION & ACCURACY

Type	Range	Resolution	Accuracy
mV (Low)	0 to 100	0.01	±0.05% F.S.
mV (High)	0 to 1000	0.1	±0.05% F.S.
Volts	0 to 10	0.001	±0.05% F.S.
mA	0 to 25	0.001	±0.05% F.S.
Ohms	0 to 500	0.01	±0.05% F.S.
KOhms	0 to 3.5	0.0001	±0.05% F.S.
RTD Pt100	-100 to 800	0.1	±0.05% F.S.

Type	Range	Resolution	Accuracy
TC Type J	-100 to 1200	0.1	±0.1% F.S.
TC Type K	-60 to 1260	0.1	±0.1% F.S.
TC Type R	150 to 1700	0.1	±0.1% F.S.
TC Type S	170 to 1700	0.1	±0.1% F.S.
TC Type N	0 to 1300	0.1	±0.1% F.S.
TC Type B	920 to 1820	0.1	±0.1% F.S.
TC Type T	0 to 400	0.1	±0.1% F.S.

STANDARD INCLUSIONS

- Basic Instrument
- Test Leads, Mains Cable & Spare Fuses
- Insertion Tubes (to suit 1/4" & 1/2" probes)
- Tool for Insertion Tubes
- Computer Interface
- "MTCCal" Calibration Software
- Traceable Calibration Certificate
- Instruction Manual
- Carrying Case

OPTIONAL (ADD-ON) ITEMS

- Additional Single hole Insert (Maximum 15 mm)
- Additional Thermowells / Insertion Tubes (to choose from) :
Single hole standard sizes to suit : 1/8", 1/4", 3/8", 1/2", 3/4" & 3, 4, 5, 6, 7, 8, 10, 12, 13, 15, 17, 19 & 21 mm probes
Multihole (Typical) : (1x6 + 1x8) or (3x6) or (1x10 + 1x4) mm
- Power Supply 110 VAC, 60 Hz
- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards

Low Temperature Dry Block Calibrator

Portable/Benchtop

350-H/350-H2

Heavy Duty

Heavy Duty Models with an array of Interchangeable/Multihole Thermowells

Ideal for quick/fast Site Calibration of RTDs/TCs/Bi-Metal Thermometers, Temperature Switches/Indicators etc. in Industrial & Marine Applications

Meets the requirements of "Safety of Life at Sea" (SOLAS IX Maintenance Regulations) & "International Safety Management" (ISM)

SALIENT FEATURES

Heavy Duty Portable / Bench-top Model
Rugged Field Use & for Calibration at Site
Auto-tune PID Control
Switch Test facility
Fast and Reliable
Improved Accuracy, Resolution & Stability
Interchangeable Thermowell Inserts, Single / Multihole
Meets CE Norms



SPECIFICATIONS

Range	10°C above Ambient to 350°C
Resolution	0.1°C
Accuracy	±1°C / 1.2°C (350-H2)
Stability	±0.3°C (350-H); ±0.4°C (350-H2)
Stabilisation Time	15 Minutes
Well Diameter	30 mm
Immersion Depth	110 mm (350-H); 190 mm (350-H2)
Heating Time (Ambient to max.) (approx.)	20 Minutes (350-H); 28 Minutes (350-H2) (approx.)
Cooling Time Max. (to 100°C) (approx.)	45 Minutes (350-H); 60 Minutes (350-H2) (approx.)
Interchangeable Thermowells	Multihole to suit 2 x ¼" & 1 x ½" Probes. Other Sizes available as optional.
Switch Test facility/Supply	Provided/5V DC (open)
Power Supply/Consumption	230V AC/50 Hz/500 W
Instrument Dimensions (L x D x H)	160 x 330 x 350 mm (350-H); 160 x 365 x 450 mm (350-H2)
Instrument Weight	7 Kg. (350-H) 8.5 Kg. (350H-2)

STANDARD INCLUSIONS

- Basic Instrument
- Test Leads
- Mains Cable
- Insertion Tubes – (to suit 2 x ¼" & 1 x ½" Probes)
- Tool for Insertion Tubes
- Spare Fuses
- Traceable Calibration Certificate
- Instruction Manual
- Carrying Case

OPTIONAL (ADD-ON) ITEMS

- Computer Interface
- "Caltemp" Calibration Software
- Additional Thermowells / Insertion Tubes (to choose from) :
Single hole standard sizes to suit : 1/8", 1/4", 3/8", 1/2", 3/4" & 3, 4, 5, 6, 7, 8, 10, 12, 13, 15, 17, 19 & 21 mm probes
Multihole (Typical) : (1x6 + 1x8) or (3x6) or (1x10 + 1x4) mm
- Power Supply 110V AC, 60 Hz
- Dual Voltage selection (110V AC & 230V AC)
- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards

Technical Datasheet

Dual Dry Block (Hot & Cold) Temperature Calibrator

HC-DB-35

Portable / Bench-top Model

To calibrate 2 Temperature Sensors simultaneously &/or at 2 different Temperatures in quick time

Portable / Bench-top Model

Ideal for Field / Lab (Hot & Cold) Calibration

SALIENT FEATURES

Compact, Fast & Reliable
Housed in Elegant / Sturdy Case, Truly Portable
Most cost effective model in the international market to calibrate over a wide range: -35°C from ambient to 350°C
Dual Dry block - to calibrate 2 temperature sensors simultaneously & or at 2 different temperatures in quick time
Auto Tune PID Control Action
Calibration time reduced by 50%



Typical Photo. Actual Product may vary

SPECIFICATIONS

	Cold Bath	Hot Bath
Range	-10°C to +123°C	50 to 350°C
Resolution	0.1°C	0.1°C
Accuracy	±1°C	±1°C
Stability	±0.2°C	±0.2°C
Heating Time (to max.)	10 minutes approx.	18 minutes, approx.
Cooling Time (to min.)	20 minutes (123°C from 0°C)	45 minutes, approx.
Well Depth	100 mm	110 mm
Well Dia	19 mm	25 mm
Thermowell Inserts	¼" & ½" Dia.	¼" & ½" Dia.
Power Supply	230 V AC, 50 Hz	

STANDARD INCLUSIONS

- Basic Instrument
- Insertion Tubes ¼" Dia & ½" Dia – 2 nos. each
- Insertion Removal Tool
- Mains Cable
- Test Leads
- Spare Fuses
- Traceable Calibration Certificate
- Instruction Manual

OPTIONAL (ADD-ON) ITEMS

- Additional Single Hole / Multihole Inserts
- Power Supply 110V AC, 60 Hz
- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231	Калининград (4012)72-03-81	Омск (3812)21-46-40	Сыктывкар (8212)25-95-17
Ангарск (3955)60-70-56	Калуга (4842)92-23-67	Орел (4862)44-53-42	Тамбов (4752)50-40-97
Архангельск (8182)63-90-72	Кемерово (3842)65-04-62	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Астрахань (8512)99-46-04	Киров (8332)68-02-04	Пенза (8412)22-31-16	Тольятти (8482)63-91-07
Барнаул (3852)73-04-60	Коломна (4966)23-41-49	Петрозаводск (8142)55-98-37	Томск (3822)98-41-53
Белгород (4722)40-23-64	Кострома (4942)77-07-48	Псков (8112)59-10-37	Тула (4872)33-79-87
Благовещенск (4162)22-76-07	Краснодар (861)203-40-90	Пермь (342)205-81-47	Тюмень (3452)66-21-18
Брянск (4832)59-03-52	Красноярск (391)204-63-61	Ростов-на-Дону (863)308-18-15	Ульяновск (8422)24-23-59
Владивосток (423)249-28-31	Курск (4712)77-13-04	Рязань (4912)46-61-64	Улан-Удэ (3012)59-97-51
Владикавказ (8672)28-90-48	Курган (3522)50-90-47	Самара (846)206-03-16	Уфа (347)229-48-12
Владимир (4922)49-43-18	Липецк (4742)52-20-81	Саранск (8342)22-96-24	Хабаровск (4212)92-98-04
Волгоград (844)278-03-48	Магнитогорск (3519)55-03-13	Санкт-Петербург (812)309-46-40	Чебоксары (8352)28-53-07
Вологда (8172)26-41-59	Москва (495)268-04-70	Саратов (845)249-38-78	Челябинск (351)202-03-61
Воронеж (473)204-51-73	Мурманск (8152)59-64-93	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
Екатеринбург (343)384-55-89	Набережные Челны (8552)20-53-41	Симферополь (3652)67-13-56	Чита (3022)38-34-83
Иваново (4932)77-34-06	Нижний Новгород (831)429-08-12	Смоленск (4812)29-41-54	Якутск (4112)23-90-97
Ижевск (3412)26-03-58	Новокузнецк (3843)20-46-81	Сочи (862)225-72-31	Ярославль (4852)69-52-93
Иркутск (395)279-98-46	Ноябрьск (3496)41-32-12	Ставрополь (8652)20-65-13	
Казань (843)206-01-48	Новосибирск (383)227-86-73	Сургут (3462)77-98-35	
Россия +7(495)268-04-70	Киргизия +996(312)-96-26-47	Казахстан +7(7172)727-132	