Weiss Instruments, the industry leader in commercial thermometers presents our complete line of Digital Temperature Indicators. Featured are two exclusive technologies, Light Powered LCD thermometers and Direct Powered LED thermometers. Our patented "Solar Only" light powered thermometers are the standards in the industry with the lowest light levels and a variety of styles that compliment OEM Equipment. Our New Generation LED Thermometers feature a new transformer-less design, which eliminates the outboard transformer allowing 120 V direct power while offering features not found elsewhere.

All Weiss digital thermometers feature our exclusive "sealed sensor" technology. A unique design incorporates a fully (food grade) potted sensor combined with our press-fit sensor bulb stopper, keeps moisture out and the temperature right. With over one million units in the field since 1992, the Weiss sensors are a proven design. Completely food grade construction, the sensor can be custom designed for various lengths, bulb materials, sizes and insertion configurations.

Designed for commercial installations, built with NSF accuracy and compliance, Weiss has digital thermometers for every application.

This application finder highlights typical Models for these installation:

## Display Refrigeration for Supermarkets

NSF Model Model No.

## SD

 2sD SD 20SD SDSD

56SD

Power
30 Lux
50 Lux
15 Lux

## Size / Mounting

1" x 4" / Surface
2" Round / Various
2" Round ( 56 mm sq. front) / Front Flange or U-Clamp

## Walk-in Coolers

SD 20SD 50 Lux $2^{\prime \prime}$ Round / Various
SD $\quad 72$ SD 30 Lux $21 / 2^{\prime \prime}$ Round ( 72 mm sq. front)/Front Flange or U-Clamp DT 20DT-F 120 or 12 Vac 2" Round / Front Flange or U-Clamp

## Reach-in Refrigeration / Freezers

| SD | 20SD | 50 Lux | 2" Round / Various |
| :--- | :---: | :---: | :---: |
| SD | 56SD | 15 Lux | 2" Round ( 56 mm sq. front) / Front Flange or U-Clamp |
| DT | 20DT-F | 120 or 12 Vac | 2" Round / Front Flange or U-Clamp |
| XT | XT11-S | 120 or $12 \mathrm{Vac} 58 \mathrm{~mm} \times 25 \mathrm{~mm} /$ Snap-in |  |
| LC | LC58 | 1.5V Battery | $58 \mathrm{~mm} \times 25 \mathrm{~mm} /$ Snap-in |

## Food Warming

SD 56SD 15 Lux $\quad$ 2" Round ( 56 mm sq. front) / Front Flange or U-Clamp
DT 20DT-F 120 or 12 Vac $2^{2 \prime}$ Round / Front Flange or U-Clamp
XT XTII-S 120 or 12 Vac $58 \mathrm{~mm} \times 25 \mathrm{~mm} /$ Snap-in

## Dishwashers

DT 20DT-F 120 or 12 Vac 2" Round / Front Flange or U-Clamp
XT XTII-S 120 or 12 Vac $58 \mathrm{~mm} \times 25 \mathrm{~mm} /$ Snap-in

## Light Powered Thermometers

Weiss Instruments is the Patent Holder \#5196781, which features a no battery design and reliable readings in very low light applications. The LCD (Liquid Crysial Display) is bold and easy to read. The extra benefit of these units is that being "Self - Powered" they need no power line or batteries to operate and therefore no need for periodic maintenance. Advantages of Light Powered Only vs Battery Back-up Design:
a. The battery will eventually fail, making the unit unreliable.
b. The battery will leak toxic material aftersome time.
c. Limited ambient temperature ratings - batteries don't work well in cold temperatures
d. Service problems in the field.

CASE: 1" x 4" Black Surface Mounting Black or Silver Mask for Logos
RANGE: $40-0-160^{\circ} \mathrm{F}$ or $40-0-70^{\circ} \mathrm{C}$
DISPLAY: 3/8" LCD
LIGHT RATING: 30 Lux to 50,000 Lux
SENSOR LENGTH: To 40Ft.
ENVIRONMENT: Splash Proof with Gasket
OPTIONS: White Case Model 25SD-W Black or White Gasket (Food Grade)
ACCURACY: NSF Accuracy for food zone
applications. ( $\pm 2^{\circ} \mathrm{F}$ between -20 to $+60^{\circ} \mathrm{F}$ ) ( $\pm 1^{\circ} \mathrm{C}$ between -29 to $+15^{\circ} \mathrm{C}$ )


NSF Model SD

## 56SD-F



NSF Model SD

CASE: 2" Round (56mm Sq. Front) Front Flange - Black Mask for Logos RANGE: $40-0-230^{\circ} \mathrm{F}$ and $40-0-110^{\circ} \mathrm{C}$

HT: Switchable
$40-0-160^{\circ} \mathrm{F}$ or $40-0-70^{\circ} \mathrm{C}$
LT: F/C Switch Optional
DISPLAY: $3 / 8^{\prime \prime}$ LCD ( $1 / 10^{\circ}$ display up to $200^{\circ} \mathrm{F}$, HT only)
LIEHT RATING: 15 Lux to 50,000 Lux
SENSOR LENGTH: To 35Ft.
ENVIRONIMENT: Waterproof from Front
OPTIONS: U-Clamp Case, Model 56SD-U
ACCURACY: $1 \%$ of reading $\pm 1^{\circ} \mathrm{F}$ or $\pm .5^{\circ} \mathrm{C}$

CASE: 21/2" Round (72mm Sq. Front)
72SD-F
Front Flange - Black and Silver for Logos
RANGE: $40-0-160^{\circ} \mathrm{F}$ or $40-0-70^{\circ} \mathrm{C}$
DISPLAY: $1 / 2^{\prime \prime}$ LCD $-1 / 10^{\circ}$ display
LIGHT RATING: 30 Lux to 50,000 Lux
SENSOR LENGTH: To 40Ft.
ENVIRONMENT: Splash Proof
OPTIONS: U-Clamp Case, Model 72SD-U
Black Gasket (Food Grade)
ACCURACY: NSF Accuracy for food zone
applications. ( $\pm 2^{\circ} \mathrm{F}$ between -20 to $+60^{\circ} \mathrm{F}$ )
( $\pm 1^{\circ} \mathrm{C}$ between -29 to $+15^{\circ} \mathrm{C}$ )


NSF Model SD

CASE: 2" Round (see Selection Table, Pg. 6) Internal White Mask for Logos
RANGE: $40-0-160^{\circ} \mathrm{F}$ or $40-0-70^{\circ} \mathrm{C}$
DISPLAY: 3/8" LCD
LIGHT RATING: 50 Lux to 50,000 Lux
SENSOR LENGTH: To 40Ft.
ENVIRONMENT: Waterproof from the Front

## 20SD-FS



NSF Model SD

## New Super Economy Digital Panel Meter

Introducing the LC58, the lowest cost Digital Thermometer available today. Designed to replace the old drum type thermometers, the LC58 snaps into a 58 mm panel cutout. It's unique front loading battery compartment makes battery changing a snap. When low costs are required, the LC58 competes with mechanical instruments anyday.


## LED Digital Thermometers

The New Generation LED Thermometers include our exclusive Direct Power feature eliminating the need for an external transformer. Powered by 120Vac, (230Vac-12Vac, optional) not only makes the unit easier to install but adds reliability and life to the instrument. With UL and NSF Listing, both designs can be ordered with special display update times to eliminate temperature fluctuations from repeated door openings. Available with 1 second, 1 minute or 3 minute display update times. Each unit now has detachable sensor and power fast-ons to speed up installation. With an extended range of -40 to $230^{\circ} \mathrm{F}$ our LED units are well suited to many applications.

## 20DT-F



NSF Model DT

CASE: Red Lexan 2" Round Front Flange -
Sonic Welded Back Plate
RANGE: $40-0-230^{\circ} \mathrm{F}$ or $40-0-110^{\circ} \mathrm{C}$
Switchable
DISPLAY: 1/2" LED
POWER: 120Vac or 12Vac (230Vac optional
UL Listed, Fast-on connectors
DISPLAY UPDATE: 1 Second, 1 Minute or
3 Minutes
SENSOR LENGTH: To 99Ft.
ENVIRONMENT: Waterproof from the Front OPTIONS: U-Clamp Case, Model 20DT-U

CASE: Red Lexan Rectangular ( $58 \mathrm{~mm} x$ 25 mm ) snap-in (Drum type)
RANGE: 3 Digits:40-0-230 F or $40-0-110^{\circ} \mathrm{C}$ 2 Digits:40-0-99 F or $40-0-99^{\circ} \mathrm{C}$
DISPLAY: 1/2" LED
POWER: 120Vac or 12 Vac (230Vac
optional) UL Listed, Fast-on connectors
DISPLAY UPDATE: 1 Second, 1 Minute or 3 Minutes
SENSOR LENGTH: To 99Ft.
ENVIRONMENT: Waterproof from the Front


NSF Model XT

## Dimensions

20SD-FS


PANEL OPENING: 2.06 DIA.


## 25SD



PANEL OPENING: 2.06 DIA.

## 72SD



MASK


PANEL OPENING: 2.609 DIA.

## 20DT-F



## 20DT-U

PANEL OPENING: 2.06 DIA.

WEISS OR
CUSTOM LOGO


PANEL GASKET - STANDARD

## XTIIS



PANEL OPENING: 59mm x 26mm


CALIBRATION POTENTIOMETER

SENSOR TERMINALS
POWER SUPPIY TERMINALS

## Sensors

The Weiss exclusive "sealed sensor" technology is standard on all Digital Thermometers. A unique design incorporates a fully (food grade) epoxy potted sensor combined with our press-fit sensor bulb stopper. This results in keeping moisture out and the temperature right.
With over one million units in the field since 1992, the Weiss sensors are a proven design.
Completely food grade construction, the sensor can be custom designed for various lengths, bulb materials and sizes.

| Cat. No. | Description | System Wire | Rating | Std. Lengths | Applicable To |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 18NB | 1.8 " $\times 1 / 4$ " Nickel Plated Brass | LDPE White or Black | NSF 300V 105C | 03FT, 05FT, 08FT | All LCD - 20DT - 12V |
| 18SS | 1.8 " $\times 1 / 4$ " Stainless Steel | LDPE White or Black | NSF 300V 105C | 03FT, 05FT, 08FT | All LCD - 20DT - 12V |
| 30SS* | 3.0 " $\times 1 / 4$ " Stainless Steel | LDPE White or Black | NSF 300V 105C | 03FT, 05FT, 08FT | All LCD - 20DT - 12V |
| 40SS* | 4.0 " $\times 1 / 4$ " Stainless Steel | LDPE White or Black | NSF 300V 105C | 03FT, 05FT, 08FT | All LCD - 20DT - 12V |
| N6U | $7 \mathrm{~mm} \times 30 \mathrm{~mm}$ Lexan | Black Double Insulated | UL/NSF 300V 105C | 06FT | 20DT (120V) \& XT11 S |

*Required Sensors for adaptive compression fittings and thermowells.

## Compression Fittings and Thermowells

| Cat. No. | Description |
| :---: | :--- |
| 019-0001 | $1 / 4^{\prime \prime}$ NPT Compression Fitting |
| 019-0002 | $1 / 2^{\prime \prime}$ NPT Compression Fitting |
| B25-75BS | $3 / 4^{\prime \prime}$ NPT Brass Thermowell / 1.5" Insertion |
| B25-75SS | $3 / 4^{\prime \prime}$ NPT Stn Steel Thermowell / $1.5^{\prime \prime}$ Insertion |



18 NB: NICKEL-PLATED BRASS (STANDARD) 18 SS: STAINLESS STEEL


30SS: 316 STANLESS STEEL, $A=3.0^{\prime \prime}$
40SS: 316 STAINLESS STEEL, A=4.0


## How to Order LED Thermometers

| Model No. | Mounting | Power | Display | Update Time* |
| :---: | :---: | :---: | :---: | :---: |
| 20DT | $\begin{aligned} & -U=U-\text { Clamp } \\ & -F=\text { Front Flange } \end{aligned}$ | $\begin{aligned} & 0=12 \mathrm{Vac} / D C \\ & 4=120 \mathrm{Vac} \end{aligned}$ | $\begin{aligned} & \mathrm{F}={ }^{\circ} \mathrm{F} \\ & \mathrm{C}={ }^{\circ} \mathrm{C} \end{aligned}$ | $\begin{aligned} & 0=1 \text { Second } \\ & 1=1 \text { Minute }{ }^{*} \\ & 3=3 \text { Minute } \end{aligned}$ |
| XTIIS <br> * Display changes $1^{\circ} \mathrm{F}$ decreasing temperature, of the update time. | Snap - in <br> change every second temperat regardless | $\begin{aligned} & 0=12 \mathrm{Vac} \\ & 4=110 \mathrm{Vac} \end{aligned}$ | $\begin{aligned} & 0=2 \text { Digit }{ }^{\circ} \mathrm{C} \\ & 1=2 \text { Digit }{ }^{\circ} \mathrm{F} \\ & 2=3 \text { Digit }{ }^{\circ} \mathrm{C} \\ & 3=3 \text { Digit }^{\circ} \mathrm{F} \end{aligned}$ | $\begin{aligned} & 0=1 \text { Second } \\ & 1=1 \text { Minute } \\ & 2=3 \text { Minute }^{*} \end{aligned}$ |

## Order Entry Example: 20DT <br> Front Flange 120Vac. ${ }^{\circ} \mathrm{F} 1$ Second Update

## How to Order LCD Light Powered Thermometers



[^0]
## LED Sensors

| 120 Vac Power | 12 Vac/DC Power |  |  |
| :---: | :---: | :---: | :---: |
| N6U - NTC - XXF $7 \times 30 \mathrm{~mm}$ Plastic Sensor | IBNB - NTC - XXFI $1.8^{1 \times 1 / 4 " ~ N i c k e l ~ P l a t e d ~ B r a s s ~}$ | $\begin{aligned} & \text { 30SS - NTC - XXFT } \\ & 3.0^{" ~ S S T ~ x ~} 1 / 4^{\prime \prime} \end{aligned}$ | 40SS - NTC - XXF |
| N6U - NTC - XXFT 7x30mm Plastic Sensor |  |  |  |



Display Refrigeration for Supermarkets


Reach-in Refrigeration / Freezers

# INIRODUEING THE 24DT-SP-LT THERMOMEIER \& HCHI SWITPH FOR WAHFINS 


$\checkmark$ LED Temp Display with ${ }^{\circ} \mathrm{F} /{ }^{\circ} \mathrm{C}$ switch
$\checkmark 1$ second, 1 minute or 3 minute display update $\checkmark$ Light switch (15A) and SST J-Box Mount Cover
$\checkmark$ 120V Direct Power
$\checkmark$ Optional Battery back-up
$\checkmark$ Save on installation costs c~Mus

Now you can combine your Light Switch and Digital Thermometer in one easy to install package. The waterproof "elbow" engaged illuminated light switch allows operators to turn on the walk-in light easily, even when their hands are full. The industrial duty light switch is rated at 15A and includes optional gasket for outdoor use.

The continuation of the evolution in Digital Thermometry from Weiss Instruments, the leader in Temperature Measurement and Control.

| Cat. No. | Description | Power | ${ }^{\circ} \mathrm{F} /{ }^{\circ} \mathrm{C}$ | Update |
| :---: | :---: | :---: | :---: | :---: |
| 24DT | $0=$ Thermometer only | $\begin{aligned} & 0=12 \mathrm{Vac} . / \mathrm{DC} \\ & 4=110 \mathrm{Vac} . \\ & 5=230 \mathrm{Vac} . \end{aligned}$ | $\begin{aligned} & \mathrm{F}={ }^{\circ} \mathrm{F}-40 / 230^{\circ} \mathrm{F} \\ & \mathrm{C}={ }^{\circ} \mathrm{C}-40 / 110^{\circ} \mathrm{C} \end{aligned}$ | $\begin{aligned} & 0=1 \mathrm{sec} . \\ & 1=1 \mathrm{~min} . \\ & 3=3 \mathrm{~min} . \end{aligned}$ |
| Ex: 24DT-04F1 0 4 <br>  0 $-\stackrel{F}{110 \mathrm{~V}}-\stackrel{{ }^{\circ} \mathrm{F}}{ }-1 \mathrm{~min}$. |  |  |  |  |
| Cat. No. | Description | Power | ${ }^{\circ} \mathrm{F} /{ }^{\circ} \mathrm{C}$ | Update |
| 24DT | S=Switchplate | $\begin{aligned} & 0=12 \mathrm{Vac} . / \mathrm{DC} \\ & 4=110 \mathrm{Vac} . \\ & 5=230 \mathrm{Vac} . \end{aligned}$ | $\begin{aligned} & \mathrm{F}={ }^{\circ} \mathrm{F}-40 / 230^{\circ} \mathrm{F} \\ & \mathrm{C}={ }^{\circ} \mathrm{C}-40 / 110^{\circ} \mathrm{C} \end{aligned}$ | $0=1 \mathrm{sec}$. <br> $1=1 \mathrm{~min}$. <br> $3=3 \mathrm{~min}$. |
|  |  |  |  |  |
| Cat. No. | Description | Power | ${ }^{\circ} \mathrm{F} /{ }^{\circ} \mathrm{C}$ | Update |
| 24DT | L=Switchplate w/ Lighted Switch | $\begin{aligned} & 0=12 \mathrm{Vac} . / \mathrm{DC} \\ & 4=110 \mathrm{Vac} . \\ & 5=230 \mathrm{Vac} . \end{aligned}$ | $\begin{aligned} & \mathrm{F}==^{\circ} \mathrm{F}-40 / 230^{\circ} \mathrm{F} \\ & \mathrm{C}={ }^{\circ} \mathrm{C}-40 / 110^{\circ} \mathrm{C} \end{aligned}$ | $\begin{aligned} & 0=1 \mathrm{sec} . \\ & 1=1 \mathrm{~min} . \\ & 3=3 \mathrm{~min} . \end{aligned}$ |
| $\begin{array}{cccc} \text { Ex: 24DT-L4F1 } & \mathrm{L} & 4 & \mathrm{~F} \\ & \mathrm{~L} & 1 \\ & 110 \mathrm{~V} & -\stackrel{\circ}{\circ} \mathrm{F} & -1 \mathrm{~min} . \\ \hline \end{array}$ |  |  |  |  |

## WEISS INSTRUMENTS INTRODUCES THE 24DT THERMOMETER


$\checkmark$ LED Temp Display with ${ }^{\circ} \mathrm{F} /{ }^{\circ} \mathrm{C}$ switch
$\checkmark 1$ second, 1 minute or 3 minute update
$\checkmark$ Optional light switch and SST cover
$\checkmark$ 120V Direct Power
$\checkmark$ Optional battery back-up
$\checkmark$ Popular back mounting
$\checkmark$ Low Cost


First there was the Ashcroft 2100E, then came the CPI TI-6000 followed by the Miljoco ED175-2403 "Little Red". Now the ev•o•lu•tion is now complete with the introduction of the Weiss 24DT. The "smart thermometer" features leave the competition in the dark ages. Features such as disconnectable sensor power, smart updates, ${ }^{\circ} \mathrm{F} /{ }^{\circ} \mathrm{C}$ switchable and no more transformers, make the 24DT the new choice in LED temperature indicators.

American Heritage Dictionary defines: ev•o•lu•tion - The gradual developement of something into a more complex or better form.

## Part Numbers

| Cat. No. 24DT | Description 0=Thermometer | Power <br> $0=12 \mathrm{Vac} . / \mathrm{DC}$ <br> $4=120 \mathrm{Vac}$. <br> $5=230 \mathrm{Vac}$. | $\begin{aligned} & { }^{\circ} \mathrm{F} /{ }^{\circ} \mathrm{C} \\ & \mathrm{~F}={ }^{\circ} \mathrm{F}-40 / 230^{\circ} \mathrm{F} \\ & \mathrm{C}={ }^{\circ} \mathrm{C}-40 / 110^{\circ} \mathrm{C} \end{aligned}$ | Update <br> $0=1$ Second <br> 1=1 Minute <br> $3=3$ Minute |
| :---: | :---: | :---: | :---: | :---: |
| Ex: 24D | $\begin{array}{cc} 1-0 & 4 \\ \hline 0 & -120 \mathrm{~V} \\ \hline \end{array}$ | $\frac{\mathrm{F}}{{ }^{\circ} \mathrm{F}}-\frac{1}{1 \mathrm{Min} .}$ | Complete with 5 Ft . S |  |

WEISS INSTRUMENTS, INC.
905 Waverly Ave., Holtsville, New York 11742
631-207-1200 • Fax 631.207.0900 • www.weissinstruments.com
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[^0]:    WARRANTY Seller warrants that all goods shall be of good quality and workmanship free from defects and conforming to all the specifications illustrated in this catalog. These warranties shall run to buyer, its successors, assigns, customers and users of the goods.

    Seller agrees, at its own expense and whenever and as often as requested by Buyer, to furnish and deliver to Buyer satisfactory evidence showing that each of said drawings and specifications have been fully and completely complied with and the goods supplied here under fully and completely conform to such specifications.
    In addition to remedies otherwise available to Buyer, Seller agrees, if requested by Buyer, to replace, repair, or make good, at Seller's cost, any defective or damaged goods furnished by Seller, for a period of one (1) year after date of acceptance by Buyer.

    RETURNED GOODS Before returning goods to Weiss Instruments, a return authorization (RA) number must be obtained from the factory. This number must appear on both cartons and accompanying paperwork.

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