

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 120V 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:

<b>Display Refrigeration for Supermarkets</b>			
<b>NSF Model</b>	<b>Model No.</b>	<b>Power</b>	<b>Size / Mounting</b>
SD	25SD	30 Lux	1" x 4" / Surface
SD	20SD	50 Lux	2" Round / Various
SD	56SD	15 Lux	2" Round (56mm sq. front) / Front Flange or U-Clamp
<b>Walk-in Coolers</b>			
SD	20SD	50 Lux	2" Round / Various
SD	72SD	30 Lux	2 1/2" Round (72mm sq. front)/Front Flange or U-Clamp
DT	20DT-F	120 or 12 Vac	2" Round / Front Flange or U-Clamp
<b>Reach-in Refrigeration / Freezers</b>			
SD	20SD	50 Lux	2" Round / Various
SD	56SD	15 Lux	2" Round (56mm 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 Vac	58mm x 25mm / Snap-in
LC	LC58	1.5V Battery	58mm x 25mm / Snap-in
<b>Food Warming</b>			
SD	56SD	15 Lux	2" Round (56mm 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 Vac	58mm x 25mm / Snap-in
<b>Dishwashers</b>			
DT	20DT-F	120 or 12 Vac	2" Round / Front Flange or U-Clamp
XT	XT11-S	120 or 12 Vac	58mm x 25mm / 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 Crystal 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 :*

- The battery will eventually fail, making the unit unreliable.
- The battery will leak toxic material aftersome time.
- Limited ambient temperature ratings - batteries don't work well in cold temperatures
- Service problems in the field.

**CASE:** 1" x 4" Black Surface Mounting  
Black or Silver Mask for Logos

**RANGE:** 40-0-160°F or 40-0-70°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. ( $\pm 2^\circ\text{F}$  between -20 to +60°F)  
( $\pm 1^\circ\text{C}$  between -29 to +15°C)

### 25SD



NSF Model SD

### 56SD-F



NSF Model SD

**CASE:** 2" Round (56mm Sq. Front)  
Front Flange - Black Mask for Logos

**RANGE:** 40-0-230°F and 40-0-110°C  
HT: Switchable

40-0-160°F or 40-0-70°C

LT: F/C Switch Optional

**DISPLAY:** 3/8" LCD (1/10° display up to 200°F, HT only)

**LIGHT RATING:** 15 Lux to 50,000 Lux

**SENSOR LENGTH:** To 35Ft.

**ENVIRONMENT:** Waterproof from Front

**OPTIONS:** U-Clamp Case, Model 56SD-U

**ACCURACY:** 1% of reading  $\pm 1^\circ\text{F}$  or  
 $\pm .5^\circ\text{C}$

**CASE:** 2 1/2" Round (72mm Sq. Front)  
Front Flange - Black and Silver for  
Logos

**RANGE:** 40-0-160°F or 40-0-70°C

**DISPLAY:** 1/2" LCD - 1/10° 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. ( $\pm 2^\circ\text{F}$  between -20 to +60°F)  
( $\pm 1^\circ\text{C}$  between -29 to +15°C)

### 72SD-F



NSF Model SD

## 20SD-FS

**CASE:** 2" Round (see Selection Table, Pg. 6)  
Internal White Mask for Logos

**RANGE:** 40-0-160°F or 40-0-70°C

**DISPLAY:** 3/8" LCD

**LIGHT RATING:** 50 Lux to 50,000 Lux

**SENSOR LENGTH:** To 40Ft.

**ENVIRONMENT:** Waterproof from the Front



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 58mm 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.

## LC58



NSF Model LC

**CASE:** Black ABS rectangular (58mm x 25mm) snap-in (Drum type)

**RANGE:** 40-0-190°F or 40-0-109°C

**CALIBRATION:**  $\pm 15^\circ\text{F}$

**DISPLAY:** 3/8" LCD, Ambient Temp.  
-35 to 160°F

**POWER:** 1.5V LR44 Watch type battery, replaceable from the front. Battery life 18-24 months (under normal conditions)

**SENSOR LENGTH:** To 40Ft.

**ENVIRONMENT:** Wipe Down

## 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°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°F or 40-0-110°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

### XT11S

**CASE:** Red Lexan Rectangular (58mm x 25mm) snap-in (Drum type)

**RANGE:** 3 Digits:40-0-230°F or 40-0-110°C  
2 Digits:40-0-99°F or 40-0-99°C

**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.

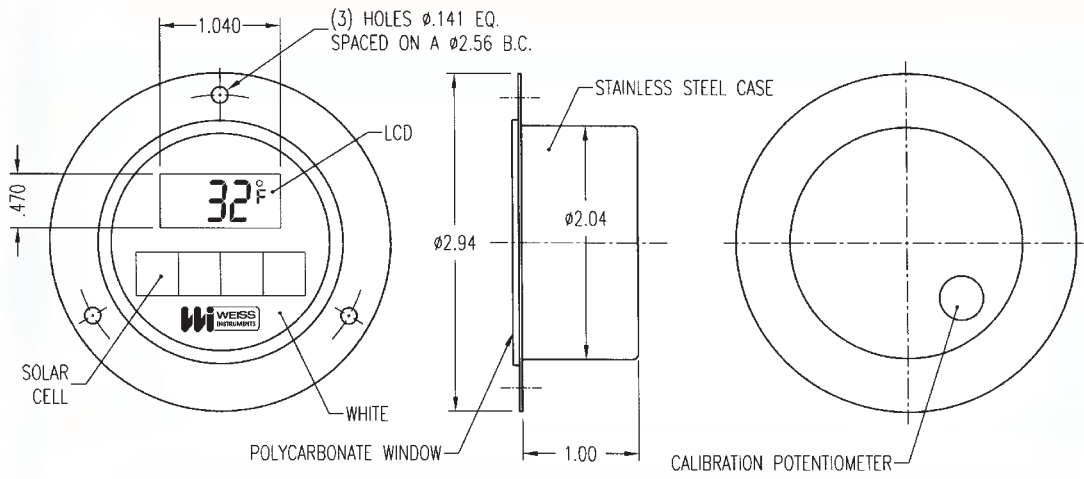
**ENVIRONMENT:** Waterproof from the Front



NSF Model XT

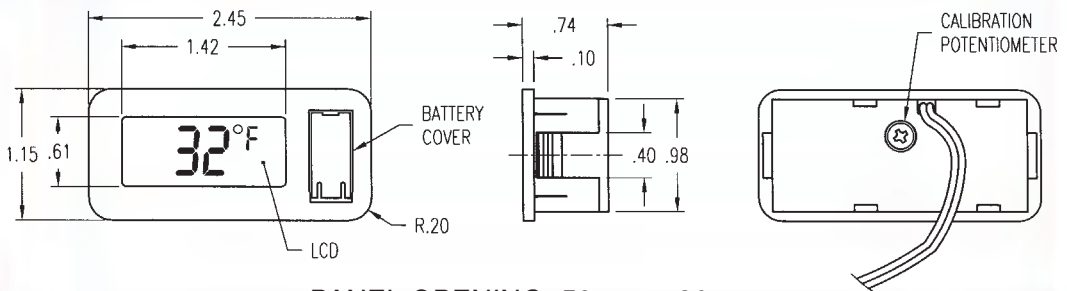
# Dimensions

## 20SD-FS



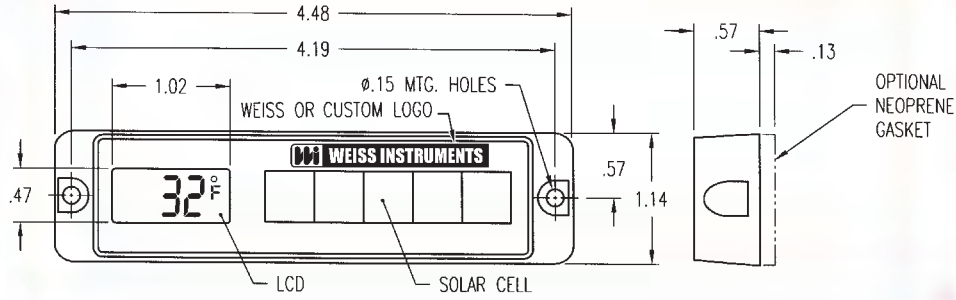
PANEL OPENING: 2.06 DIA.

## LC58

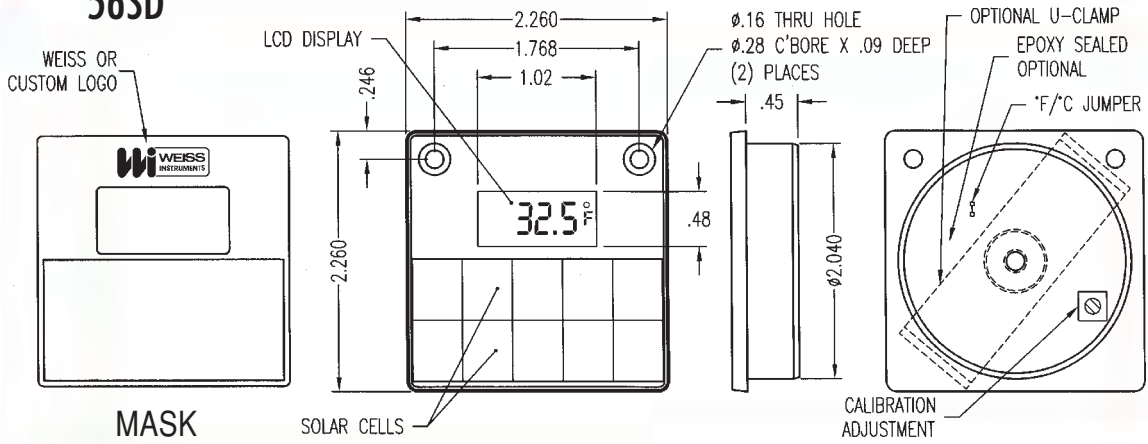


PANEL OPENING: 59mm x 26mm

# 25SD

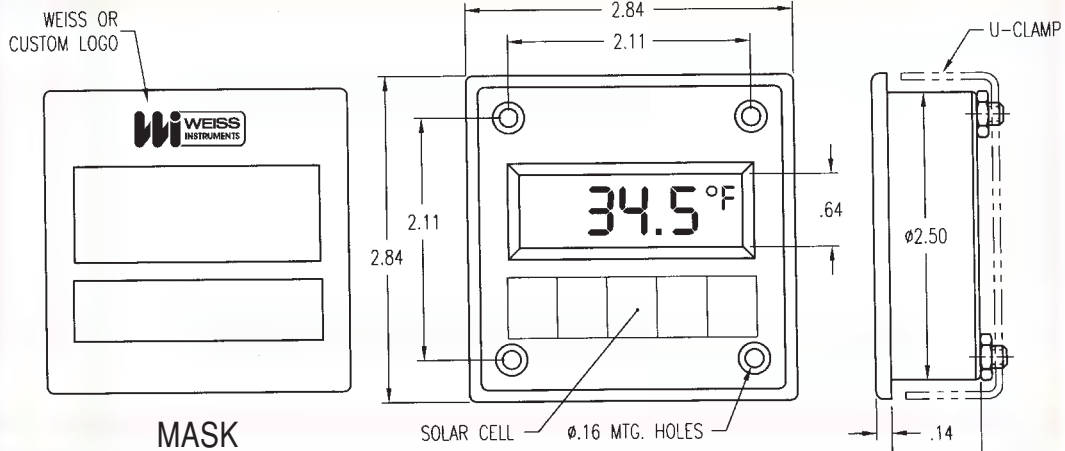


# 56SD



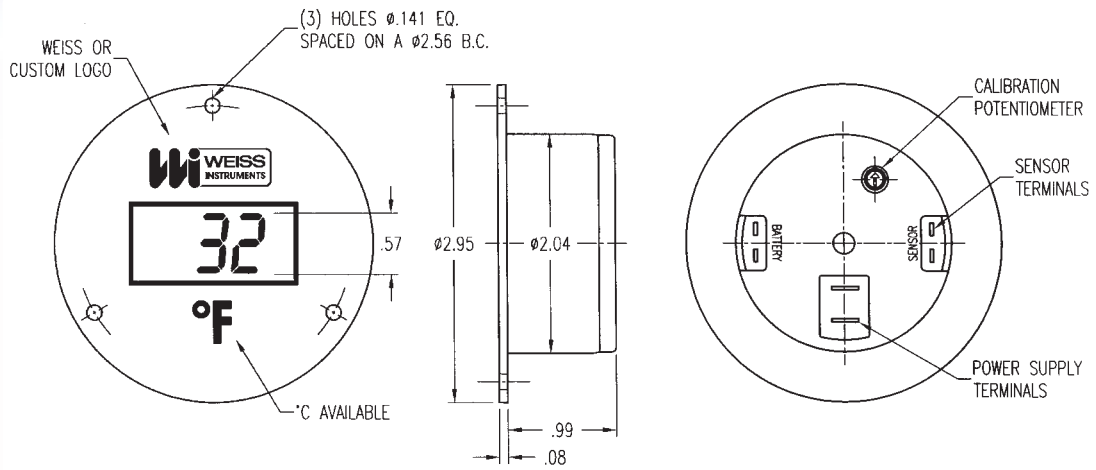
PANEL OPENING: 2.06 DIA.

# 72SD



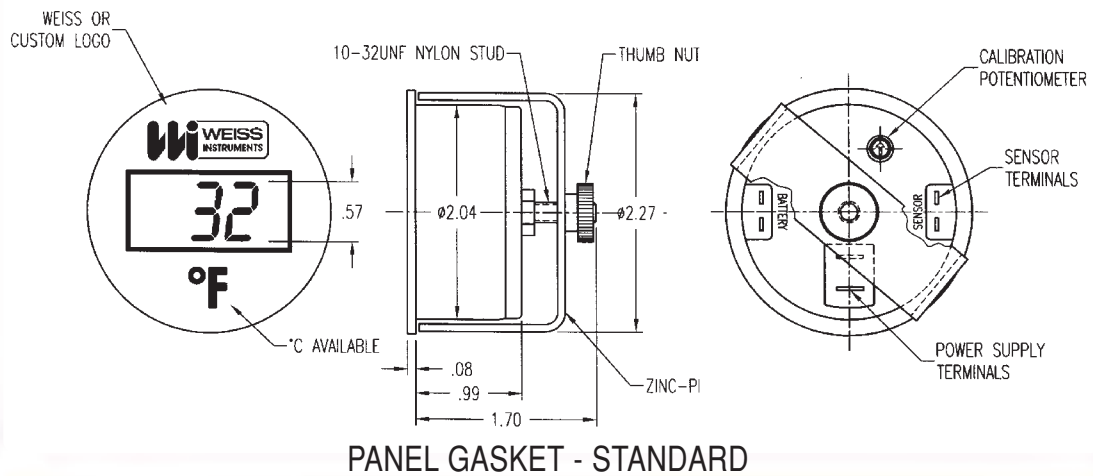
PANEL OPENING: 2.609 DIA.

## 20DT-F



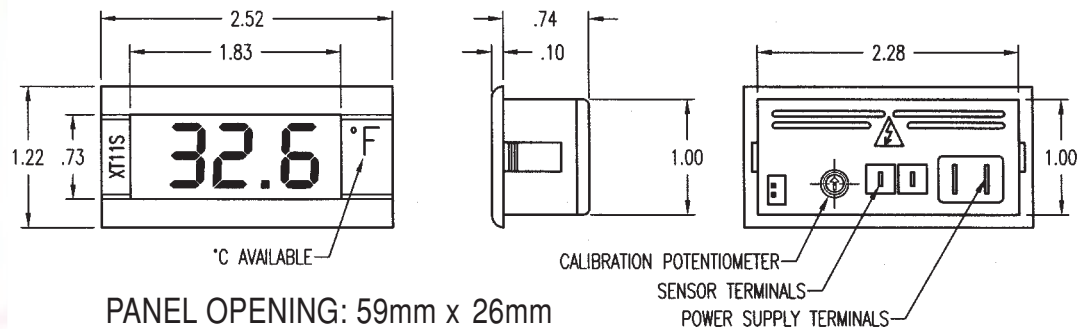
PANEL OPENING: 2.06 DIA.

## 20DT-U



PANEL GASKET - STANDARD

## XT11S



PANEL OPENING: 59mm x 26mm

## 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.

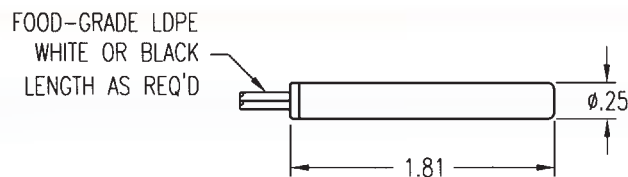
Completely food grade construction, the sensor can be custom designed for various lengths, bulb materials and sizes.

Cat. No.	Description	System Wire	Rating	Std. Lengths	Applicable To
18NB	1.8" x 1/4" Nickel Plated Brass	LDPE White or Black	NSF 300V 105C	03FT, 05FT, 08FT	All LCD - 20DT - 12V
18SS	1.8" x 1/4" Stainless Steel	LDPE White or Black	NSF 300V 105C	03FT, 05FT, 08FT	All LCD - 20DT - 12V
30SS*	3.0" x 1/4" Stainless Steel	LDPE White or Black	NSF 300V 105C	03FT, 05FT, 08FT	All LCD - 20DT - 12V
40SS*	4.0" x 1/4" Stainless Steel	LDPE White or Black	NSF 300V 105C	03FT, 05FT, 08FT	All LCD - 20DT - 12V
N6U	7mm x 30mm Lexan	Black Double Insulated	UL/NSF 300V 105C	06FT	20DT (120V) & XT11S

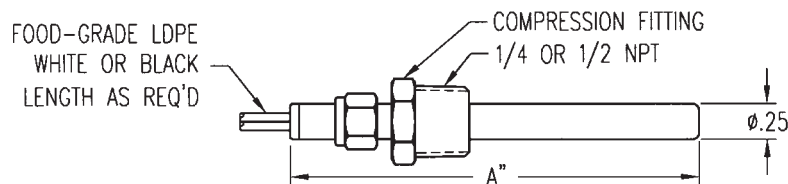
\*Required Sensors for adaptive compression fittings and thermowells.

## Compression Fittings and Thermowells

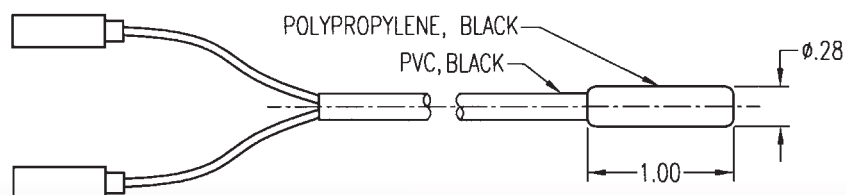
Cat. No.	Description
019-0001	1/4" NPT Compression Fitting
019-0002	1/2" NPT Compression Fitting
B25-75BS	3/4" NPT Brass Thermowell / 1.5" Insertion
B25-75SS	3/4" NPT Stn Steel Thermowell / 1.5" Insertion



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



30SS: 316 STAINLESS STEEL, A=3.0"  
40SS: 316 STAINLESS STEEL, A=4.0"



## How to Order LED Thermometers

Model No.	Mounting	Power	Display	Update Time*
20DT	-U = U-Clamp -F = Front Flange	0 = 12Vac / DC 4 = 120 Vac	F = °F C = °C	0 = 1 Second 1 = 1 Minute* 3 = 3 Minute*
XT11S	Snap – in	0 = 12Vac 4 = 110 Vac	0=2 Digit °C 1=2 Digit °F 2=3 Digit °C 3=3 Digit °F	0 = 1 Second 1 = 1 Minute* 2 = 3 Minute*

\* Display changes 1°F every 1 or 3 minutes on increasing temperature - on decreasing temperature, the display will change every second, regardless of the update time.

**Order Entry Example: 20DT - F - 4 F 0**  
 Front Flange 120Vac. °F 1 Second Update

## How to Order LCD Light Powered Thermometers

Model No's	+	Ranges	+	Sensors	+	System Lengths
25SD		40-0-160F		18NB		03FT
20SD		40-0-160F		18SS		05FT
56SD-HT		40-0-230F&C <sup>1</sup>		30SS <sup>2</sup>		08FT
56SD-LT		40-0-160F or C <sup>1</sup>		30SS <sup>2</sup>		08FT
72SD		40-0-160F&C		40SS <sup>2,3</sup>		*XXFT XXFT BAT**

1. F/C Switchable      2. Required for Compression Fitting      3. Required for Compression Fitting and Thermowell

\* See item for system limits    \*\* Code for Battery Backup    XX = Length

Example:	Model	Range	Sensor	System Length
	25SD	40-0-160F or 40-0-70C	18NB	05FT

**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.

*The continuous improvement of Weiss products can cause some variations in the information included in this catalog, even without notice.*

## LED Sensors

120 Vac Power	12 Vac /DC Power		
N6U - NTC - XXFT 7x30mm Plastic Sensor	18NB - NTC - XXFT 1.8" x 1/4" Nickel Plated Brass	30SS - NTC - XXFT 3.0" SST x 1/4"	40SS - NTC - XXFT
N6U - NTC - XXFT 7x30mm Plastic Sensor			



**Display Refrigeration for Supermarkets**



**Reach-in Refrigeration / Freezers**