



TIM CAMPBELL 800-400-7500



Item # \_\_\_\_\_

Job \_\_\_\_\_

## SmartTray™ System

Designed to maximize productivity by accelerating throughput, minimizing PCB handling damage and providing superior ESD protection. The 18" x 26" footprint handles multiple-sized boards.

The ESD-safe SmartTray facilitates efficient tracking of work-in-process and finished goods with the use of bar code technology, and supports lean manufacturing by offering color-coding accessories to identify trays and carts.

Molded from Metrostat™, a material offering premium ESD protection, the SmartTray fits all Metro tray cart systems as well as all competitive bottom-loaded models, and most tray based cart systems in today's marketplace.

Put the SmartTray advantage to work for you!



**SmartTray™ features barcoding and color coding, and stacks with other trays of the same footprint.**



**SmartTray™ engages with wire cart design to provide optimum ergonomic access.**

## Features:

- Bar code labeling

- Color coding

- Detent system

- Metrostat™ material

- Universal design

- Cart color coding

## Benefits:

- Trays & tray contents can be tracked throughout manufacturing/assembly process.
- Trays & tray contents can be scanned while in cart, as opposed to scanning each item individually.
- Trays & tray contents can be sorted & categorized according to product type, application, or dedicated to a specific production line.
- Trays can be suspended in cart for optimum ergonomic access.
- Offers permanent ESD protection for sensitive electronics parts.
- SmartTrays can be used with all bottom-load tray cart designs, Metro and non-Metro models, as well as conveyor systems.
- Carts can be sorted & categorized according to product type, application, or specific production line.



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SmartTray™ System

# SmartTray Cart System

Cat. No. **CBNTC20M** — shown with accessories





# SmartTray™ System

## Specifications

- **Shelves, posts, slides, handles & stop bars:** ESD safe chrome-plated finish with Metrolac protective coating.
- **Casters:** 5" stem/swivel vibration suppression casters (5MFA series). Two brake, two swivel casters.

### SmartTray Cart Solutions (cart with trays & tray inlays)

\*Choose between Metro's premium two-layer tray inlay or the economy inlay (see ESD Tray Inlay section below for more information).

Cat. No.	Description	Tray Inlay Type*	Tray Capacity	Slide Spacing		Width/Length		Height		Approx. Pkd. Wt.	
				(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(lbs.)	(kg)
CBNTC20MSOL1	Front-load cart with SmartTrays (20) & tray inlays (20)	Premium	20	1¾	44	28x22	711x559	49	1245	160	72.5
CBNTC30MSOL1	Front-load cart with SmartTrays (30) & tray inlays (30)	Premium	30	1¾	44	28x22	711x559	63	1600	217	98
CBNTCS20MSOL1	Side-load cart with SmartTrays (20) & tray inlays (20)	Premium	20	1¾	44	22x30	559x762	49	1245	160	72.5
CBNTC20MSOL2	Front-load cart with SmartTrays (20) & tray inlays (20)	Economy	20	1¾	44	28x22	711x559	49	1245	160	72.5
CBNTC30MSOL2	Front-load cart with SmartTrays (30) & tray inlays (30)	Economy	30	1¾	44	28x22	711x559	63	1600	217	98
CBNTCS20MSOL2	Side-load cart with SmartTrays (20) & tray inlays (20)	Economy	20	1¾	44	22x30	559x762	49	1245	160	72.5

**Note:** Refer to Tray Inlay & SmartTray section below for technical & electrical property information

### Olympic SmartTray™

Cat. No.	Description	Color	Maximum Load Rating		Outside Dimensions		Inside Dimensions		Height		Approx. Pkd. Wt.					
			(lbs.)	(kg)	Width	Length	Width	Length	(in.)	(mm)	(lbs.)	(kg)				
CBNTC-MTRAY	ESD molded fiberglass tray	Black	150	68	25¾	17¾	654	451	23 <sup>15</sup> / <sub>16</sub>	15 <sup>15</sup> / <sub>16</sub>	608	405	1 <sup>1</sup> / <sub>8</sub>	28.6	3	1.36

**NOTE 1:** Tray load rating shown above is based on evenly distributed load in conveyor applications.

**NOTE 2:** SmartTray safe temperature operating range is -20°F to 160°F.

**NOTE 3:** SmartTrays stack efficiently by themselves, as well as with competitive tray designs of the same dimension.

**NOTE 4:** SmartTrays are compatible with all bottom-loaded tray based cart systems, both Metro and non-Metro.

**NOTE 5:** SmartTrays can be stamped with a company logo. Minimum quantities and extended lead times apply. Contact your Metro Representative for more information.

#### CBNTC-MTRAY Electrical Properties:

Property	Test Method	Value
RTT Resistance	ESD S4.1-1997	1.8x10 <sup>5</sup> -1.4x10 <sup>7</sup> Ohms
RTG Resistance	ESD S4.1-1997	1.4x10 <sup>6</sup> -2.8x10 <sup>6</sup> Ohms
Surface Resistivity	ANSI/EOS/ESD-S11.11-1993	1.0x10 <sup>6</sup> -9.9x10 <sup>9</sup> Ohms/Sq.

### ESD Tray Inlays

Cat. No.	Description	Color	Width/Length		Thickness		Approx. Pkd. Wt.			
			(in.)	(mm)	(in.)	(mm)	(lbs.)	(kg)		
CBTC-INLAY01*	<b>Premium</b> rubber inlay, two-layer	Blue (topside)/Black (bottomside)	24.125	16.1	612	410	0.06	1.5	1.5	0.68
CBNTC-INLAY02**	<b>Economy</b> vinyl inlay, single-layer	Blue	24	16.125	610	410	0.125	3	1.5	0.68

\*CBTC-INLAY01 offers maximum ESD protection, as well as superior resistance to heat, abrasion, and chemicals. The soft dissipative top layer makes it ideal for use in soldering and assembly areas. Easy to clean and maintain.

\*\*CBNTC-INLAY02 provides soft-surface inlay for cushioned PCB transport. Inlay provides static dissipative ESD protection. Not recommended for use in soldering and assembly applications.

#### CBTC-INLAY01 Electrical Properties:

Property	Test Method	Value
RTT Resistance	ESD S4.1-1997	4.6x10 <sup>6</sup> -9.0x10 <sup>6</sup> Ohms
RTG Resistance	ESD S4.1-1997	2.3x10 <sup>6</sup> -4.7x10 <sup>6</sup> Ohms

#### CBNTC-INLAY02 Electrical Properties:

Property	Test Method	Value
RTT Resistance	ESD S4.1-1997	1.2x10 <sup>7</sup> -9.0x10 <sup>7</sup> Ohms
RTG Resistance	ESD S4.1-1997	1.4x10 <sup>7</sup> -2.0x10 <sup>7</sup> Ohms

### SmartTray Carts

Cat. No.	Description	Tray Capacity No.	Slide Spacing		Width/Length		Height		Approx. Pkd. Wt.	
			(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(lbs.)	(kg)
CBNTC20M	Front-Load Cart (short)	20	1¾	44	28x22	711x559	49	1245	80	36
CBNTC30M	Front-Load Cart (tall)	30	1¾	44	28x22	711x559	63	1600	97	44
CBNTCS20M	Side-Load Cart	20	1¾	44	22x30	559x762	49	1245	80	36

**NOTE:** CBNTC20M & CBNTCS20M are each load rated at 25 lbs. per level/500lbs. per cart. CBNTC30M is load rated at 20 lbs. per level/600 lbs. per cart.

**NOTE:** Each cart comes complete with 4 vibration suppression casters (2 brake/2swivel), a grounding cable, 2 push handles (except CBNTC30M), & 2 stop bars.



## SmartTray™ System

## SmartTray™ Accessories

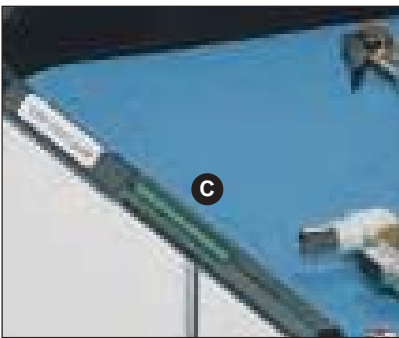


### A SmartTray Barcode Labels

White, blank thermal transfer labels measures 3"L x .37"H. 1,000 labels per roll/removable adhesive/3" roll core. Compatible with all major thermal transfer label printers. Cat. No. **CBNTC-BCLBL**

### B SmartTray Color Label Kit

Colored labels measure .375" in diameter/250 per roll. 6 colored rolls per kit/removable adhesive. Colors: Tan, Red, White, Yellow, Blue and Green. Same colors offered as color Shelf Markers (opposite). Cat. No. **CBNTC-COLBL**



### C SmartTray Paint Pens

Paint Pens provide more of a permanent tray color coding solution. Box includes one each of Black, White, Blue, Red, and Green pens. Use Black to neutralize color. Cat. No. **CBNTC-PENS**



### ESD Cart Covers

Conductive on the outside and static dissipative on the inside. Cover material is durable and comes standard with brass zippered front flap and side paperwork pouch.

Cat. No. **CBNTC-CC20**

fits SmartTray Cart # CBNTC20M

Cat. No. **CBNTC-CC30**

fits SmartTray Cart # CBNTC30M

Cat. No. **CBNTC-CCS20**

fits SmartTray Cart # CBNTCS20M



### ESD Label Holder

Identify cart assignment or function with Metro's ESD-safe label holder (label not included).

Label holder measures 3"L x 1.25"H.

Cat. No. **9990PESD**



### Color Shelf Markers

Designed to color code cart.

Tan — Cat. No. **CSM6-T**



Red — Cat. No. **CSM6-R**



White — Cat. No. **CSM6-W**



Yellow — Cat. No. **CSM6-Y**



Blue — Cat. No. **CSM6-B**



Green — Cat. No. **CSM6-G**



Color Markers measure 6"L x 1.25"H.

Order in units of one.



### ESD Paperwork Basket

Store work order information, inspection record and other accompanying documentation in this convenient, durable and ESD-safe basket. Easy-on, easy-off design. Not recommended for use with ESD Cart Covers. Measures 13.375"Lx5"Wx7"H.

Cat. No. **H209C**