



# SmartTray<sup>™</sup> 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.

Molded from Metrostat.<sup>™</sup> 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<sup>™</sup> engages with wire cart design to provide optimum ergonomic access.

## Features:

- Bar code labeling
- Color coding
- Detent system
- Metrostat<sup>™</sup> 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 Cart System Model No. CBNTC2OM - shown with accessories Ergonomic Handles (2) SmartTray™ Stacking Area **Cart Color Coding** ESD Label Holder (Label not Included) ESD Paperwork Basket SmartTray™ Bar Code Label (Supplied Blank) SmartTray™ (shown with inlay) Stop Bars (2) (front & back) ESD Grounding Cable Vibration Suppression Casters . (2 Brake/2 Swivel)



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## 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).

		Tray	Tray	Slic Spac		Width	/Length	He	ight	App Pkd.	. Wt.
Model No.	Description	Inlay Type*	Capacity	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(lbs.)	(kg)
CBNTC20MSOL1	Front-load cart with SmartTrays (20) & tray inlays (20)	Premium	20	<b>1</b> <sup>3</sup> / <sub>4</sub>	44	28x22	711x559	49	1245	160	72.5
CBNTC30MSOL1	Front-load cart with SmartTrays (30) & tray inlays (30)	Premium	30	<b>1</b> <sup>3</sup> / <sub>4</sub>	44	28x22	711x559	63	1600	217	98
CBNTCS20MSOL1	Side-load cart with SmartTrays (20) & tray inlays (20)	Premium	20	13/4	44	22x30	559x762	49	1245	160	72.5
CBNTC20MSOL2	Front-load cart with SmartTrays (20) & tray inlays (20)	Economy	20	<b>1</b> <sup>3</sup> / <sub>4</sub>	44	28x22	711x559	49	1245	160	72.5
CBNTC30MSOL2	Front-load cart with SmartTrays (30) & tray inlays (30)	Economy	30	13/4	44	28x22	711x559	63	1600	217	98
CBNTCS20MSOL2	Side-load cart with SmartTrays (20) & tray inlays (20)	Economy	20	13/4	44	22x30	559x762	49	1245	160	72.5

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

#### Olympic SmartTray<sup>™</sup>

orympic offici	thay		Maxin Load R		Outside Dir Width/Lu		Inside Dime Width/Le		Height	Approx. Pkd Wt	
Model No.	Description	Color	(lbs.)	(kg)	(in.)	(mm)	(in.)	(mm)	(in.) (mm)	(lbs.) (kg)	
CBNTC-MTRAY	ESD molded	Black	150	68	25 <sup>3</sup> /4 x 17 <sup>3</sup> /4	654x451	23 <sup>15</sup> /16 x 15 <sup>15</sup> /16	608x405	1 <sup>1</sup> /8 28.6	3 1.36	
	fiberglass tray										

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.

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

#### **ESD Tray Inlays**

			Width/L	Thick	ness	Pkd Wt.		
Model No.	Description	Color	(in.)	(mm)	(in.)	(mm)	(lbs.)	(kg)
CBTC-INLAY01*	Premium rubber inlay,	Blue (topside)/Black (bottomside)	24.125x16.1	612x410	0.06	1.5	1.5	0.68
	two-layer							
CBNTC-INLAY02**	Economy vinyl inlay,	Blue	24x16.125	610x410	0.125	3	1.5	0.68
	single-layer							

\*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	4.6x10^6-9.0x10^6 Ohms						
RTG Resistance	ESD S4.1-1997	2.3x10^6-4.7x10^6 Ohms						

CBNTC-INLAY02 Electrical Properties:									
Property Test Method Value									
RTT Resistance	ESD S4.1-1997	1.2x10^7-9.0x10^7 Ohms							
RTG Resistance	ESD S4.1-1997	1.4x10^7-2.0x10^7 Ohms							

#### SmartTray Carts

Sinart rray Carts	ſ	Tray Capacity	Slide Spacing	Width	h/Length	Hei	aht	App Pkd.	
Model No. Des	cription	No.	(in.) (mm)		(mm)	(in.)	(mm)	(lbs.)	(kg)
CBNTC20M Fro	nt-Load Cart (short)	20	1 <sup>3</sup> / <sub>4</sub> 44	28x22	711x559	49	1245	80	36
CBNTC30M Fro	nt-Load Cart (tall)	30	1¾ 44	28x22	711x559	63	1600	97	44
CBNTCS20M Sid	e-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<sup>™</sup> Accessories



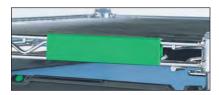
## ESD Cart Covers

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.

Model No. CBNTC-CC20 fits SmartTray Cart # CBNTC20M

Model No. CBNTC-CC30 fits SmartTray Cart # CBNTC30M

Model No. CBNTC-CCS20 fits SmartTray Cart # CBNTCS20M



#### **Color Shelf Markers** Designed to color code cart.

Tan Model No. CSM6-T Red Model No. CSM6-R White Model No. CSM6-W Yellow Model No. CSM6-Y Blue Model No. CSM6-B Green Model No. CSM6-G

Color Markers measure 6"L x 1.25"H. Order in units of one.



## ESD Label Holder

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

Model No. 9990PESD (3"L x 1.25"H) Model No. 9990P6ESD (37"L x 1.25"H)



#### **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"L x 5"W x 7"H.

Model No. H209C

Metro products are available via: www.romex.nl





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Test & Measurement

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