

# CAT 3 U/UTP CMR 50PAIR/24AWG

## PART NO. 3CMR2450RX

### DESCRIPTION

• 24 AWG/25 Pair unshielded twisted pair 1000' feet solid copper on wood reels. Cable comes with standard ripcord for stripping jacket and it is marked every two feet so one can see how much cable is left in the box.

### FEATURES AND BENEFITS

- Used for Voice communications
- Jacket: Flame - retardant PVC / Sequential footage markings
- Rip Cord is applied longitudinally under jacket
- Verified by third-party for guaranteed performance

### APPLICATIONS

- Voice/Telephone/Fast Ethernet
- 10 Base - T
- 100 Base - T4
- 100 Base - X 100 Base - VG
- 4/16 Mbps Token Ring ANSI X3T9.5 TP - PMD (FDDI)
- ATM PMD 155 Mbps

### STANDARD COMPLIANCES

- ANSI/TIA 568-C.2
- ANSI/TIA 862 (Building Automation)
- ISO/IEC 11801 Ed. 2.0 (Class EI)
- ICEA 8-102-700 (Category 6 or 5E)
- REACH Compliant
- CPR Compliant (Fully Comply to 305/2011 & EN 50575:2014-09)
- RoHS Compliant Directive 2002/95/EG

### PHYSICAL PROPERTIES

	CMR (Non-Plenum)
Conductor	Solid Bare Copper
Conductor Diameter (mm)	0.50
Average Thickness (±0.03mm)	0.16
Minimum Point Thickness (mm)	0.15
Unit Lay Length (mm)	500 underneath
Color Tape Lay Length (mm)	<150
Maximum Pulling Force (lbs)	
Twisting Lay Length	80 underneath
100P Cabling Lay Length (mm)	800 underneath
Installation Dia (±0.05mm)	0.83

JACKET		CMR (Non-Plenum)
Filler		Without
Average Thickness (±0.1mm)		0.80
Minimum Point Thickness (mm)		0.75
Before Aging	Tensile Strength (Mpa)	≥13.8
	Elongation (%)	≥100
After Aging	Tensile Strength (Mpa)	≥85% of unaged
	Elongation (%)	≥50% of unaged
Cold Bend (No Crack)		-20±2°Cx4hrs
Temperature Rating		-20°C to +75°C
Max Pull Strength		200N
Aging Condition (°Cxhrs)		100x240
Standard Color		Gray

50 PAIR			COLOR CODE		
Pair 1	O	W	Pair 26	O	W
Pair 2	OR	W	Pair 27	OR	W
Pair 3	V	W	Pair 28	V	W
Pair 4	BN	W	Pair 29	BN	W
Pair 5	G	W	Pair 30	G	W
Pair 6	O	R	Pair 31	O	R
Pair 7	OR	R	Pair 32	OR	R
Pair 8	V	R	Pair 33	V	R
Pair 9	BN	R	Pair 34	BN	R
Pair 10	G	R	Pair 35	G	R
Pair 11	O	B	Pair 36	O	B
Pair 12	OR	B	Pair 37	OR	B
Pair 13	V	B	Pair 38	V	B
Pair 14	BN	B	Pair 39	BN	B
Pair 15	G	B	Pair 40	G	B
Pair 16	O	Y	Pair 41	O	Y
Pair 17	OR	Y	Pair 42	OR	Y
Pair 18	V	Y	Pair 43	V	Y
Pair 19	BN	Y	Pair 44	BN	Y
Pair 20	G	Y	Pair 45	G	Y
Pair 21	O	VT	Pair 46	O	VT
Pair 22	OR	VT	Pair 47	OR	VT
Pair 23	V	VT	Pair 48	V	VT
Pair 24	BN	VT	Pair 49	BN	VT
Pair 25	G	VT	Pair 50	G	VT

### ELECTRICAL CHARACTERISTICS

Elongation of Conductor	Min 15%
Elongation of Insulation	Min 300%
Tensile Strength of Insulation	Min 6Mpa
Shrinkage of Insulation	Max 5%
Elongation of Jacket (unaged)	Min 200%
Tensile strength of Jacket (unaged)	Min 12Mpa
Capacitance	56pF/km
Capacitance unbalance	500pF/100km
Max. Conductor DC Resistance 20°C	≤93.8
Resistance Unbalance (%)	≤5
Insulation Resistance	5000MΩ-km
Dielectric Strength	DC.1.5kv, 7min

### JACKETS ABBREVIATION

Black	B	Last alphabetical character of each part number indicates the color code that the Jacket is available in. For example Part # 6CMR-244Bx ("x" indicates all the colors to the left are available for this product.
White	W	
Gray	G	
Blue	O	
Yellow	Y	
Green	V	
Orange	OR	
Purple	P	
Red	R	
Pink	PI	

1000' Wood Reel  
Weight: 100 lbs.

### CAT 3 U/UTP CMR 25PAIR/24AWG ELECTRICAL SPECIFICATION

FREQUENCY (MHz)	ATTENUATION (DB/100m)	NEXT (DB)	SRL (DB)	IMPEDANCE (DB/100m)
0.772	2.2	43	12	100 ± 15
1	2.6	41	12	100 ± 15
4	5.6	32	12	100 ± 15
8	8.5	28	12	100 ± 15
10	9.7	26	12	100 ± 15
16	13.1	23	10	100 ± 15

\*All values in this specification are nominal and are subjective to tolerances of +/- 10 to 15%. It is the sole responsibility of the user to have the most current specification. Specifications are subject to change without notice\*

Toll Free: (866) 945-5051  
Local: (770) 945-5051  
Fax: (770) 945-9582  
www.commoditycables.com

