

- » Industry Leader with 50 Years Experience
- » World Class Manufacturing Infrastructure
- » State-of-the-art Technology
- » Global Distribution Network



Tii Technologies Inc.
Corporate Headquarters:
141 Rodeo Drive
Edgewood, NY 11717
Phone: 631.789.5000
Fax: 631.789.5063
Toll Free: 888.844.4720
sales@tiitech.com
www.tiitech.com



Lightning Protection 101

Anytime outside plant (OSP) copper cable is on a bill of materials (BOM) or a project bid, the project will require lightning protection

The following types of products on a typical Bill of Material might indicate a lightning protection opportunity:

- Small and Large pair count copper cable: 4, 6, 12, 25, 100, 300 or higher
- Direct buried copper, aerial copper, outdoor conduit cable or gel-filled cable
- Any low voltage copper cable that is running outdoor (Unshielded Twisted Pair (UTP) or COAX) including: telephony (CAT 3), data (CAT 5, 5E, 6), security (UTP or Coax), alarm (multi-conductor cabling) industrial controls (signaling cable)

Any time you sell OSP cable, mention to the customer that Primary Protection is going to be required.

Identifying lightning protection opportunities...

1. Who buys lightning protection?

OSP Contractors, Universities, Hospitals, Construction Sites (temporary facilities), Telephone Companies, OSP Integrators, Telecom Shelter Manufacturers, OSP Distribution Cabinet Manufacturers, Cellular Providers (or Contractors), Military contractors, and Security Contractors

2. What types of installations require lightning protection?

Campus environments, Outdoor access points, Extended telco demarcs, Outdoor telco demarcs, Outdoor wireless access points, Outdoor security cameras, Industrial controls, Multi-floor multi-tenant buildings, Military bases

Once you determine that you have a lightning protection opportunity, the next step is to select the appropriate protection product...

1. Start with the Pair count

- Building Entrance Terminals (BETs) run from 4 to 2400 pair count sizes to match cables

2. What kind of Termination is preferred?

- 66, 110, field splice (710, MS2), connectorized or cable stub

3. Is a splice chamber required?

- Splice chamber BETs are suggested when gel filled OSP cable is used.
- Series 24 BETs include a covered splice chamber; Series 25 BETs do not include a splice chamber

4. Is a cover required?

- Series 24 and Series 25 BETs are available with a lockable protector and connector field cover

5. How will the protector blocks be mounted?

- Wall mounted - All BETs and protector packs up to 100 pairs are wall mountable
- Rack mounted - Most BETs are rack mountable with optional mounting hardware
- Tii/Porta Systems offers protector blocks for Main Distribution Frame (MDF) and Central Office (CO) environments

6. Do they need to be mounted outdoors?

- Please visit www.tiitech.com for more information on “OF BET SERIES” Outdoor Fixed BETs

Once you have a block you need to select a protector module...

- Each pair of wire requires a protector module (i.e. 12 pair cable requires a 12 pair block with 12 protector modules)
- Protector Modules are sometimes referred to as fuses, modules, protectors or arrestors
- The type of signal transmission determines the protector module type

Gas Tube Modules are ideal for the following applications:

- Basic code requirements
- High durability
- Analog telephony
- Digital (VDSL2 & ADSL2/2+)

Solid State Modules are ideal for the following applications:

- Protection for sensitive equipment
- Fast reaction time
- Digital telephony and data

www.tiitech.com



tii technologies



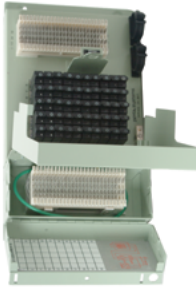
Quick Cross Reference Guide

Building Entrance Terminal (BET)	Input	Output	Tii/Porta Systems Model #	Circa Model #
100-Pair	66	66	24100-66-M66C	1890ECT1-100
			25100-66-M66C	1890ECT1/NSC-100
	110	110	24100-110-M110C	1880ECA1-100G
			25100-110-M110C	1880ENA1/NSC-100G
50-Pair	ST	66	25100-ST-M66C	1890BC1-100
		110	25100-ST-M110C	1880B1-100
	66	66	24050-66-M66C	1890ECT1-50
			25050-66-M66C	1890ECT1/NSC-50
25-Pair	110	110	24050-110-M110C	1880ECA1-50G
			25050-110-M110C	1880ENA1/NSC-50G
	ST	66	25050-ST-M66C	1890BC1-50
		110	25050-ST-M110C	1880B1-50
6-Pair	66	66	24025-66-M66C	1890ECT1-25
			25025-66-M66C	1890ECT1/NSC-25
	110	110	24025-110-M110C	1880ECA1-25G
			25025-110-M110C	1880ENA1/NSC-25G
12-Pair	66	66	512	2612QC/QC
			512GT	2612QC/QC (w/3B1E)
	110	110	1512	1880ENA1/NSC-12
			1512GT	1880ENA1/NSC-12 (w/3B1E)
25-Pair	66	66	525	2625QC/QC
			525GT	2625QC/QC (w/3B1E)
	110	110	1525	1880ENA1/NSC-25G
			1525GT	1880ENA1/NSC-25G (w/3B1E)
Protector Modules	Type		Tii/Porta Systems Model #	Circa Model #
Protector Modules	3B1E		175-3C1EW-NL	C3B1E
	4B1E		195-6C1EM-NL	C4B1E
	3B1S		105-3C1S75-N	C3B1S-75
	3B1S		105-3C1FS-N	C3B1FS-240
	3B1S		105-3C1ES-N	C3B1S
	4B3S		113-6C3S75-N	C4B3S-75
	4B1S		115-6C1S75-N	C4B1S-75
	4B1S		115-6C1FSC-N	C4B1FS-240
CAT5E / CAT6 Protector Packs	4B1S		115-6C1ESC-N	C4B1S
	BAL		195-6C4EM-NL	C4B1FS-BAL
			Tii/Porta Systems Model #	Circa Model #
CAT5E			505E4-27*	—
CAT64PR			606-65	—

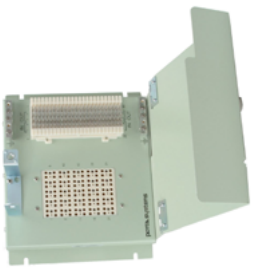
www.tiitech.com

888.844.4720

*Additional custom configurations available. Please contact Tii Technologies/Porta Systems Customer Service for more information.



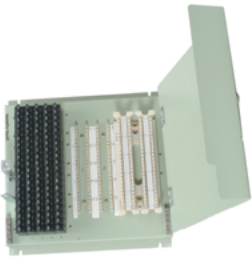
24050-66-M66PC
50 Pair 66 In/Out
Factory Installed Protectors



25025-66-M66C
25 Pair 66 In/Out



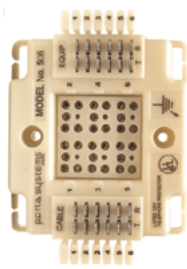
24100-66-M66PC
100 Pair 66 In/Out
Factory Installed Protectors



25100-110-M110PC
100 Pair 110 In/Out
Factory Installed Protectors



195BCDXN



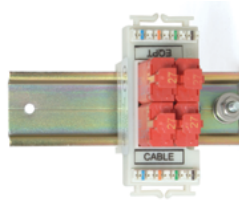
506
6 Pair 66 In/Out



195-6C9EM-NL



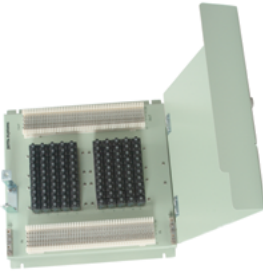
1525
25 Pair 110 In/Out



505E4-27
CAT5E 27V
110 Termination
(Includes Modules)



24100-110-M110C
100 Pair 110 In/Out



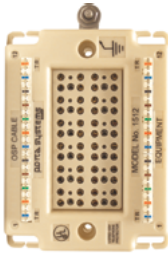
25100-66-M66PC
100 Pair 66 In/Out
Factory Installed Protectors



24050-110-M110PC
50 Pair 110 In/Out
Factory Installed Protectors



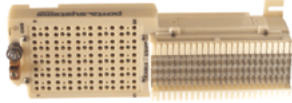
25025-110-M110C
25 Pair 110 In/Out



1512
12 Pair 110 In/Out



175-3C1EW-NL



525
25 Pair 66 In/Out



606-65
CAT6 65V
110 Termination
(Includes Modules)