

FIBRE DISTRIBUTION FRAME

General

8. Fiber distribution frame box is a cost-effective enclosure designed to administer and protect up to 24 or 48 ports depending on which fiber adapter panel is used. These units are ideal for use in compact areas, such as entrance facilities and wiring closets, due to the units' small size. The enclosure is manufactured from 16AWG-galvanized steel with a textured powder coated finish. Cable tie supports are provided for securing cable at the cable entry openings. Cables can enter from the top or bottom of the enclosure through grommets specially designed to keep out dust. Fiber management rings with two independent fiber routing channels are included for fiber storage and for maintaining minimum bend radius requirements. In addition to the routing channels, four individual cable management clips are included to customize the cable routing.

9. Type Of Distribution Frame

(a) Fiber Main Distributing Frame (FMDF).

(i) This frame features six 5-inch (12.7cm) rear horizontal troughs. The abundant trough space minimizes fiber pile up and congestion leading to easier jumper traceability and removal.

(ii) The frame has twelve Fiber Termination Block (FTB) mounting positions equally divided between vertical columns on the left and right sides of the frame. The built-in jumper storage panel will store up to 5.0 meters of jumper slack.

(b) Front Facing Fiber Main Distributing Frame (F3MDF).

(i) Front Facing Fiber Main Distributing Frame (F3MDF) is designed for single-sided access applications and may be mounted up against a wall or back-to-back to save floor space.

(ii) Unlike the fiber main distributing frame (FMDF), the more compact F3MDF is equipped with a single 9-inch (22.9 cm) horizontal trough on the front. The F3MDF has twelve Fiber Terminal Block (FTB) mounting positions equally divided between vertical columns on the left and right sides of the frame. The built-in jumper storage panel will store up to 5.0 meters of jumper slack.

(iii) The frame is available in 23.6-, 26- and 30-inch (60.0, 66.0 and 76.2 cm) widths. The 30-inch frame provides additional vertical trough space and is highly recommended for the highest termination density applications.

(c) Fiber Slim Rack.

(i) This rack features a space-saving, all front access design for installation against the wall or in back-to-back configurations. Both on-frame or off-frame

splicing conventions are supported. The use of high-density fiber terminal blocks (FTBs) allows up to 216 terminations with on-frame splicing or up to 432 terminations with off-frame splicing. The built-in jumper storage panel will store up to 5.0 meters (16.4 feet) of jumper slack.

(ii) The Slim Rack is intended for use in a single frame application and should not be used in a multi-frame lineup. When ordering FTBs for the Slim Rack, remember that only left oriented blocks are used on this frame.

9

10. Imp Features.

(a) All front access design saves floor space.

(b) Built-in jumper slack storage system minimizes required jumper lengths.

(c) Superior fiber management reduces congestion and jumper pile-up.

(d) Innovative design supports long-term future fiber growth projections.

(e) Each frame section includes heavy duty anchor bolts for concrete floor applications

QRs SPECIFICATION FOR FIBER DISTRIBUTION FRAME

Ser No Features Specification

1. Insertion Loss <-0.20 db for single mode(SM)

<-0.03 db for multi mode(SM)

2. Return loss >-50 db (SPC)

>-55 db(USC)

>-65 db(APC)

3. Repeatability <0.1 db

4. Mating Durability <0.1 db(500 times)

5. a)Operating Temperature

b) Storage temperature

c) Humidity

-40 *c to 85* c

-40 *c to 85 * c

95 % RH

FIBRE DISTRIBUTION BOX

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or 48 ports depending on which fiber adapter panel is used. These units are ideal for use in

compact areas, such as entrance facilities and wiring closets, due to its small size. The encl is

manufactured from 16 AWG - galvanized steel with a textured powder coated finish. Cable tie

supports are provided for securing cable at the cable entry openings. Cables can enter from

the top or bottom of the encl to keep out dust. Fiber mgt rings with two independent fiber

routing chs are included for fiber storage and for maintaining min bend radius reqmts. In

addition to the routing chs, four incl cable mgt clips are included to customize the cable routing.

Optical Distribution Box

12. Rack mount fiber distribution box/cabinet is used for fast and convenient cable laying

and distr on optical distr rooms, frames. There are LC/SC/FC or any other connectors

available. The box is made in a style of separately installable cassettes and each of them can

have or 12 or 24 ports. This allows easy fiber cable splicing and connection because each of

the trays can be removed separately and also results in easy maint. Properties desired are :-

(a) 12 or 24 ports easy move-in/move-out trays.

(b) Suitable for 19' or 23' ODF's and racks.

(c) Adaptors should be clipped at 28 degree angle, so it protects the fiber cable from unnecessary bending.

(d) Usable for ribbon type cable, or for regular pigtails.

(e) SC/PC/LC adapters should be available in set.

(f) Big enough to store more than 2 m of pigtail.

(g) Effective mounting elements for cable laying inside the box.

(h) Full set of installation materials should be supplied like nuts & bolts, protection elements, tape.

10

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5. (a) Operating Temperature

(b) Storage temperature

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-40 *c to 85* c

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5. (a) Operating Temperature

(b) Storage temperature

(c) Humidity

-40 *c to 85* c

-40 *c to 85 * c

95 % RH

OPTICAL FIBRE PATCH CORD

General

18. Optical Patchcord so called fiber cable assembly is connector terminated both ends and ready for installation. Plank offer full-range of optic fiber Patchcords at FC, SC, ST - PC, UPC or APC connectivity. All our patch products come with Low insertion loss, Low return loss, environmentally stable and reliable, precise dimension and wide selection of ferrules. Plank Patchcord is the best choice for CATV, Telecom Server, Subscriber Loop, Fiber-to-the-home, and Local Area Network (LAN) applications. There is another type of fiber cable assembly called Pigtail, it is a short optical fiber permanently attached to a source, detector, or other fiber optic device at one end and an optical connector at the other. Pigtail is specially for optical device connectivity.

Ser

No

Features Specification

1. Insertion Loss

<-**0.20 db for single mode(SM)**

<-**0.03 db for multi mode(SM)**

2. Return loss >-50 db (SPC

>-55 db(USC)

>-65 db(APC)

3. Repeatability <0.1 db

4. Mating Durability <0.1 db(500 times)

5. (a) Operating Temperature

(b) Storage temperature

(c) Humidity

-40 *c to 85* c

-40 *c to 85 * c

95 % RH

12

19. Optical Patch cord.

Patchcord Multi-Mode

Connector Type FC/PC SC/PC ST/PC LC MU MTRJ

Insertion Loss(dB) _ 0.4 _ 0.5

Operation Temperature(°C) -40 to +75

Storage Temperature(°C) -55 to 85

Cable Dimensions(mm)

Loose tube :0.9()

PVC:3.0()

20. Plank PO/MTP Patch Cord.

MPO / MTP PATCH CARD

Insertion loss (dB)

Typical $\pm 0.5 \pm 0.5$

Maximum $\pm 0.75 \pm 0.75$

Return Loss (dB) ≥ 60

Operation temp.(°C) -40 to +75

Storage temp.(°C) -55 to +85

Durability (500cycles) $< 0.2 < 0.2$

**Cable request:PVC, LSZH, Bare

Ribbon

**Cable length: Customer specified

21. Plank Optical Termination Patchcord.

Finish Unit Return loss

PC $> 45\text{dB}$

UPC (Ultra PC) $> 55\text{dB}$

APC (Angled PC)

$\pm 0.5 \pm 0.38\text{L}$

$+0.5 \pm 0.5\text{L}+0.5$

$> 60\text{dB}$

QUALITATIVE REQUIREMENTS (QRs) FOR FIBER PATCH CORDS

See No Features Specification

1. Insertion Loss $< -0.20\text{ db}$ for single mode(SM)

$< -0.03\text{ db}$ for multi mode(SM)

2. Return loss $> -50\text{ db}$ (SPC)

$> -55\text{ db}$ (USC)

$> -65\text{ db}$ (APC)

3. Repeatability $< 0.1\text{ db}$

4. Mating Durability $< 0.1\text{ db}$ (500 times)

5. a) Operating Temperature

b) Storage temperature

c) Humidity

$-40\text{ }^{\circ}\text{C}$ to $85\text{ }^{\circ}\text{C}$

$-40\text{ }^{\circ}\text{C}$ to $85\text{ }^{\circ}\text{C}$

95 % RH

Patchcord Single-Mode

Connector Type

FC/PC

SC/PC

ST/PC

LC

MU

E2000/PC

FC/APC

SC/APC

E2000/APC

**QRs FOR FIBER PIGTAILS SC (3 Mtrs)
OPTICAL FIBRE PATCH CORD**

General

18. Optical Patchcord so called fiber cable assembly is connector terminated both ends and ready for installation. Plank offer full-range of optic fiber Patchcords at FC, SC, ST - PC, UPC or APC connectivity. All our patch products come with Low insertion loss, Low return loss, environmentally stable and reliable, precise dimension and wide selection of ferrules. Plank Patchcord is the best choice for CATV, Telecom Server, Subscriber Loop, Fiber-to-the-home, and Local Area Network (LAN) applications. There is another type of fiber cable assembly called Pigtail, it is a short optical fiber permanently attached to a source, detector, or other fiber optic device at one end and an optical connector at the other. Pigtail is specially for optical device connectivity.

Ser

No

Features Specification

1. Insertion Loss

<-0.20 db for single mode(SM)

<-0.03 db for multi mode(SM)

2. Return loss >-50 db (SPC

>-55 db(USC)

>-65 db(APC)

3. Repeatability <0.1 db

4. Mating Durability <0.1 db(500 times)

5. (a) Operating Temperature

(b) Storage temperature

(c) Humidity

-40 *c to 85* c

-40 *c to 85 * c

95 % RH

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Appendix 'B'

**FORM FOR TECHNICAL BID AND COMPLIANCE STATEMENT FOR
QUALITATIVE
REQUIREMENTS (QR) FOR FIBRE DISTRIBUTION FRAME**

Yes

No

Features Specifications Compliance

(Yes/No)

Deviations,

if any

**1. Insertion Loss <-0.20 db for single
mode(SM)**

<-0.03 db for multi mode(SM)

Yes/No

2. Return loss >-50 db (SPC)

>-55 db(USC)

>-65 db(APC)

Yes/No

3. Repeatability <0.1 db Yes/No

4. Mating Durability <0.1 db(500 times) Yes/No

5. a)Operating Temperature

b) Storage temperature

c) Humidity

-40 *c to85* c

-40 *c to 85 * c

95 % RH

Yes/No

Note : Please quote for state-of-the-art and one of the most reliable and robust products and mention their make and model.

Date

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Appendix 'C'

**FORM FOR TECHNICAL BID AND COMPLIANCE STATEMENT FOR
QUALITATIVE**

REQUIREMENTS (QR) FOR FIBRE DISTRIBUTION BOX

Ser

No

Features Specifications Compliance

(Yes/No)

Deviations,

if any

1. Insertion Loss

<-0.20 db for single mode(SM)

<-0.03 db for multi mode(SM)

Yes/No

2. Return loss >-50 db (SPC

>-55 db(USC)

>-65 db(APC)

Yes/No

3. Repeatability <0.1 db Yes/No

4. Mating Durability <0.1 db(500 times) Yes/No

5. (a) Operating

Temperature

(b) Storage

temperature

(c) Humidity

-40 *c to85* c

-40 *c to 85 * c

95 % RH

Yes/No

Note : Please quote for state-of-the-art and one of the most reliable and robust products and mention their make and model.

Date

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Appendix 'F'

FORM FOR TECHNICAL BID AND COMPLIANCE STATEMENT FOR
QUALITATIVE
REQUIREMENTS (QR) FOR PIG TAILS

Yes

No

Features Specifications Compliance

(Yes/No)

Deviations,

if any

1. Insertion Loss < -0.20 db for single mode(SM)

< -0.03 db for multi mode(SM)

Yes/No

2. Return loss > -50 db (SPC)

> -55 db(USC)

> -65 db(APC)

Yes/No

3. Repeatability < 0.1 db Yes/No

4. Mating Durability < 0.1 db(500 times) Yes/No

5. (a) Operating Temperature -40°C to 85°C Yes/No

(b) Storage temperature -40°C to 85°C Yes/No

(c) Humidity 95 % RH Yes/No

Note : Please quote for state-of-the-art and one of the most reliable and robust products and mention their make and model.

Date

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Appendix 'G'

**FORM FOR TECHNICAL BID AND COMPLIANCE STATEMENT FOR
QUALITATIVE**

REQUIREMENTS (QR) FOR PATCH CORDS FOR OFC

Ser

No

Features Specifications Compliance

(Yes/No)

Deviations,

if any

1. Insertion Loss <-0.20 db for single mode(SM)

<-0.03 db for multi mode(SM)

Yes/No

2. Return loss >-50 db (SPC)

>-55 db(USC)

>-65 db(APC)

Yes/No

3. Repeatability <0.1 db Yes/No

4. Mating Durability <0.1 db(500 times) Yes/No

5. (a) Operating Temperature -40 *c to 85* c Yes/No

(b) Storage temperature -40 *c to 85 * c Yes/No

(c) Humidity 95 % RH Yes/No

Note : Please quote for state-of-the-art and one of the most reliable and robust products and mention their make and model.

Date