

Fiber Optic Distribution Box Technical Datasheet

Model AM-FDB-16A8-PA-14 Protection Grade IP68





FINAL DRAFT FOR MANUFACTURER VALIDATION

This datasheet is structured to address the technical requirements of ICE Tender Item 5. Statements marked PENDING ATTACHMENT require the corresponding manufacturer certificate or signed test report before tender submission.

Product Identification and Offered Configuration

Manufacturer	Aimit Communication (Shenzhen) Co., Ltd. / AIMIFIBER
Model	AM-FDB-16A8-PA-14
Tender configuration	16 subscriber drop ports; 8-port version is optional and not part of this offered configuration
Splitter	1 × 1:16 PLC splitter with SC/APC terminations
Adapters	16 × SC/APC installed
Pigtails	16 × G.657.B3 single-mode, 1 m, SC/APC installed
Housing material	PP+GF polypropylene reinforced with glass fiber — manufacturer confirmation required
Dimensions	380*245*130 mm
Ingress protection	IP68; model-specific certificate pending attachment
Installation	Outdoor, wall, circular pole, aerial and underground register/chamber
Color	Black

Tender Technical Compliance

Technical requirement	Offered specification	Evidence status
Application	Purpose-built FTTx fiber enclosure for splicing, splitting, distribution, protection and management of optical fibers.	Current datasheet
Housing material	Polypropylene-based housing; self-extinguishing, flame-retardant, odorless and non-toxic.	Material declaration pending
Environmental resistance	Resistant to temperature changes, salinity, oxygen exposure, ultraviolet radiation and ageing.	Manufacturer declaration pending
Surface and workmanship	Free from cracks, sharp edges, cuts, breaks, deformation, bulges, impact marks and manufacturing irregularities.	Quality declaration pending
Impact resistance	Withstands a 2 kg mass impact at the center of the housing from a height of 0.5 m; IK9.	Test report pending
Distribution cable	Compatible with distribution cable up to 24 optical fibers.	Current datasheet

Technical requirement	Offered specification	Evidence status
Subscriber connection	Internal SC/APC connection between splitter pigtails and drop cables; subscriber connections are not made by fusion splice.	Configuration declaration pending
Fiber standard	Installed single-mode pigtails comply with ITU-T G.657.B3.	Pigtail certificate pending
Mid-span operation	Stores a loop of uncut loose tubes and permits selective cutting and splicing only of fibers feeding the box.	Drawing and declaration pending
Splice functions	Supports straight-through and branch mid-span splices in one or more cables.	Installation procedure pending
Cable openings	Preformed cable openings can be used without manufacturer-specific drilling tools and retain sealing after branch installation.	Declaration and seal test pending
Main cable ports	At least four entry/exit passages in the offered system, including the equivalent of two passages for one uncut 24-fiber distribution cable.	Port drawing pending
Drop ports	Sealed round or oval outlets with all cable-retention accessories for G.657.B3 drop cable.	BOM and compatibility pending
Closure and re-entry	Designed for multiple rapid opening and closing operations without manufacturer-specific tools while maintaining the required ingress protection.	Manufacturer declaration pending
Port configuration	One oval mid-span port, two branch ports and 16 sealed drop ports; final four-passage compliance drawing required.	Port drawing pending
Distribution cable diameter	Mid-span and branch cable range Ø8–Ø18 mm.	Current datasheet
Drop cable size	2 × 3 mm through Ø7 mm, using the applicable sealing plug.	Current datasheet
Splice capacity	Final offered capacity: 36 fibers; all trays and 36 individual 60 mm sleeves to be supplied.	Manufacturer confirmation pending
Flammability	UL 94 V-0.	Certificate pending
Underground use	Suitable for installation in a register/chamber while maintaining IP68 sealing after mid-span or branch work.	Declaration and test pending
Fiber-management system	Internal loose-tube and fiber-management system maintains bend radius and enables organization and identification for future interventions.	Drawing pending

Technical requirement	Offered specification	Evidence status
Tray-holder system	Removable tray-holder provides convenient and rapid access to loose tubes, bare fibers and splice reserves.	Current datasheet plus declaration
Splice trays	Flat resistant trays with protective covers and individual positions for 60 mm heat-shrink sleeves; sleeves are not stacked.	Tray drawing pending
Sleeve quantity	60 mm heat-shrink sleeves are supplied for the complete offered splice capacity.	Final BOM pending
Minimum loose-tube bend radius	50 mm.	Current datasheet
Minimum bare-fiber bend radius	5 mm.	Current datasheet
Splitter construction	Symmetrical PLC splitter containing no flammable or toxic materials.	Material declaration pending
Splitter terminations	Factory pre-connected pigtails with SC/APC male connectors.	Current datasheet
Pigtail mechanical properties	High tensile strength, high flexibility and low bend sensitivity.	Test report pending
Pigtail fire behavior	Flame-retardant and non-smoke-emitting.	Test report pending
Label material	White polyester label with strong thermal-transfer-compatible adhesive, installed on the outside of the enclosure.	Label sample pending
Required label content	Manufacturer name and legend ICE TELECOMUNICACIONES.	Current datasheet
Required lettering	Minimum height 5 mm, width 4 mm and spacing 2 mm between letters.	Current datasheet
Spanish manual	One Spanish installation manual supplied with each unit.	Manual pending attachment

Optical Splitter Performance

Parameter	1:16	Evidence
Power ratio per output	6.25%	Signed splitter test report pending
Maximum insertion loss	14 dB	Signed splitter test report pending
Maximum uniformity	0.8 dB	Signed splitter test report pending

Parameter	1:16	Evidence
Maximum PDL	0.4 dB	Signed splitter test report pending
Minimum return loss	≥55 dB	Signed splitter test report pending
Minimum directivity	≥55 dB	Signed splitter test report pending

Included Components and Accessories

- 1 × 1:16 PLC splitter installed and connected
- 16 × SC/APC adapters
- 16 × G.657.B3 SC/APC pigtails, 1 m
- 36 × heat-shrink splice sleeves, 60 mm, matching offered capacity
- Splice trays with protective covers for 36 fibers
- Mastic sealant, insulating tape and sealing plugs
- Fiber-protection tubes, cable ties and fixing rings
- Wall-mounting and pole-mounting hardware
- Accessories required for underground register/chamber installation
- Spanish installation manual

Manufacturer Documents Required Before Tender Submission

- Signed confirmation that the housing is PP+GF, not PC+GF, and consistent correction throughout the datasheet.
- Manufacturer IP68 certificate identifying the exact model, port seals and final configuration.
- Signed correction fixing the splice capacity at 36 fibers and providing 36 matching 60 mm sleeves.
- Port drawing proving the required four entry/exit passages and uncut mid-span cable function.
- Declaration and test evidence that IP68 sealing is maintained after branch or mid-span installation.
- Splitter datasheet and signed 1:16 optical test report for all values listed above.
- G.657.B3 pigtail certificate plus tensile, flexibility, flame and smoke test evidence.
- Final bill of materials and Spanish installation manual.

Manufacturer Validation

The manufacturer confirms that the final production configuration of model DA-FDB-16A8-PA-14 is accurately described in this datasheet and that all attached certificates and test reports apply to the offered units.

Manufacturer legal name	____ Aimit Communication (Shenzhen) Co., Ltd.
Authorized representative	____ Sophie Wang _____
Position	____ Sales Manager _____
Date	____ 2026.09.14 _____
Signature and company stamp	