

SSC2231&SSC2232 Series of Half Style Closure iODNCP V100R001C11

Product Description

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Introduction

1.1 Product Positioning

The SSC2231&SSC2232 half style closure series is mainly used at FTTx-ODN networks, storing, connecting, and protecting optical fibers. It supports manhole, hand hole, aerial, and wall-mounted installation.

M NOTE

The SSC2231-48A supports 4-core ribbon optical cables while the SSC2231-96, 72, 48, 24 and SC2232-180, 144, 108, 72 support bundle optical cables.

Figure 1-1 shows the application of the SSC2231&SSC2232 series in the FTTx-ODN network.

Half style closure Optical cable OLT node OLT node distribution point Access point Feeder Distribution optical cable

Figure 1-1 SSC2231&SSC2232 series in the network

Basic structure of the FTTx-ODN

optical cable

The product features a modular structure, which enables flexible configuration of functional modules to meet various capacity requirements. The series includes: SSC2231-96, 72, 48, 24 and SSC2232-180, 144, 108, 72

Storing, connecting, and protecting optical fibers

• Splicing capacity: 96, 72, 48, 24, 180, 144, 108, and 72 cores respectively (bundle optical cables)

SSC2231-48A

- Storing, connecting, and protecting optical fibers
- Splicing capacity: 48 cores (4-core ribbon optical cables)

M NOTE

Naming rules of SSC2231-Y: "SSC" is short for splitting and splicing closure, the first "2" indicates a common closure, the second "2" indicates a half style closure, "31" represents the model of the product, "Y" indicates the splicing capacity.

1.2 Product Benefits

Flexible Configurations Easing the Network Deployment

- The middle cable aperture of the SSC2232 supports Φ 16 mm to Φ 25 mm optical cables.
 The side cable apertures of the SSC2232 and the cable apertures of the SSC2231 support Φ 10 mm to Φ 21 mm optical cables. Both the SSC2232 and SSC2231 support manhole, hand hole, aerial, and wall-mounted installation.
- Different number of splicing trays can be assembled into closures with different capacities to meet different capacity requirements in various application scenarios.

Modular Design Easing the Maintenance

- Mechanical sealing makes the case performance reliable, and sealing strips do not need
 to be changed after the case is opened, making the closure suitable for outdoor
 application.
- The clear modular structure of the splicing tray and cable fixing bracket facilitates user operations.

Product Structure

2.1 Overview

The SSC2231&SSC2232 half style closure series consists of the case, splicing tray, cable fixing bracket, and installation accessories. The closures provide 2 types of fiber splice protectors: one type for bundle optical cables and the other type for 4-core ribbon optical cables. Table 2-1 shows the specifications of the SSC2231&SSC2232 series.

Table 2-1 Specifications of the SSC2231&SSC2232 series

Mod el	Dime nsions (mm)	Capacity	Capacity		mu Func m Mode	Numb Functi Modu	onal er of les Cable		Diameter of Supported Optical Cables
				Capa city of a Splic ing Tray	Splic ing Tray	Brac ket	Apert ures	Cubics	
SSC2 231-2 4	533 x 209 x 104	24 cores	Each slot holds 3 fiber splice protector s.	24	1	1	4	Φ 10 mm to Φ 21 mm	
SSC2 231-4 8A	533 x 209 x 104	48 cores (4-core ribbon optical cables)	Each slot holds 3 fiber splice protector s.	48	1	1	4	Φ 10 mm to Φ 21 mm	
SSC2 231-4 8	533 x 209 x 104	48 cores	Each slot holds 3 fiber splice protector s.	24	2	1	4	Φ 10 mm to Φ 21 mm	

Mod el	Dime nsions (mm)	Capacity		Maxi mu m	Numb Functi Modu	onal	Numb er of Cable	Diameter of Supported Optical
				Capa city of a Splic ing Tray	Splic ing Tray	Brac ket	Apert ures	Cables
SSC2 231-7 2	533 x 209 x 104	72 cores	Each slot holds 3 fiber splice protector s.	24	3	1	4	Φ 10 mm to Φ 21 mm
SSC2 231-9 6	533 x 209 x 104	96 cores	Each slot holds 3 fiber splice protector s.	24	4	1	4	Φ 10 mm to Φ 21 mm
SSC2 232-7 2	648 x 253.8 x 158	72 cores	Each slot holds 3 fiber splice protector s.	36	2	1	6	Φ 10 mm to Φ 25 mm
SSC2 232-1 08	648 x 253.8 x 158	108 cores	Each slot holds 3 fiber splice protector s.	36	3	1	6	Φ 10 mm to Φ 25 mm
SSC2 232-1 44	648 x 253.8 x 158	144 cores	Each slot holds 3 fiber splice protector s.	36	4	1	6	Φ 10 mm to Φ 25 mm
SSC2 232-1 80	648 x 253.8 x 158	180 cores	Each slot holds 3 fiber splice protector s.	36	5	1	6	Φ 10 mm to Φ 25 mm

2.2 Structure

Exterior

Figure 2-1 shows the exterior of the SSC2231&SSC2232 half style closure series.

Figure 2-1 Exterior of the half style closures

SSC2231



SSC2232



M NOTE

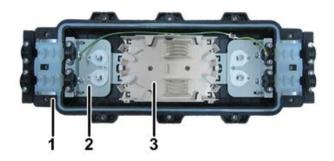
The product exterior of SSC2231-24 and SSC2231-48A is completely the same, but they support different optical cable types.

Structure

The SSC2231 and SSC2232 products consist of case, splicing trays and cable fixing bracket, Figure 2-2 shows the product structures of the closure.

Figure 2-2 Structures of the SSC2231 and SSC2232

SSC2231



SSC2232



(1) Case (2) Cable fixing bracket (3) Splicing tray

Case and Functional Modules of the Closure

Figure 2-3 shows the case accessories of SSC2231&SSC2232 series.

Figure 2-3 Case accessories



- (1) Wall-mounted accessories
- (2) Air valve
- (3) Aerial installation accessories

Figure 2-4 shows the functional modules of SSC2231&SSC2232 series.

Figure 2-4 Functional modules

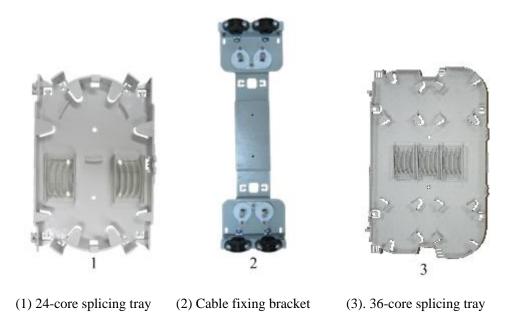


Table 2-2 lists the functions of the case and functional modules of the closures.

Table 2-2 Functions of the case and functional modules

Case and Functional Modules		Function
Case	Wall-mounted accessories	Mount the case on the wall.
	Air valve	Detect the atmospheric pressure in the closure and pump air into the closure.
	Common optical cable	Each common cable aperture supports a Φ 10 mm to Φ 21 mm bundle optical cable.
	aperture	Each common cable aperture supports a Φ 10 mm to Φ 21 mm 4-core ribbon optical cable.
		The biggest cable aperture supports a Φ 16 mm to Φ 25 mm bundle optical cable.
Splicir	ng tray	Support a splicing capacity of 24 cores.
		Support a splicing capacity of 36 cores.
		Support a splicing capacity of 48 cores.
Cable	fixing bracket	Store straight-through optical fibers and secure splicing trays.

3 Product and Application Scenarios

3.1 Overview

At the feeder section and the distribution section in the FTTx optical network, the SSC2231&SSC2232 half style closure series is used to store, connect and protect optical fibers.

3.2 Application Scenarios

Figure 3-1 shows the typical application scenario of the SSC2231&SSC2232 half style closure series.

Figure 3-1 Typical application scenario of the SSC2231&SSC2232 half style closure series

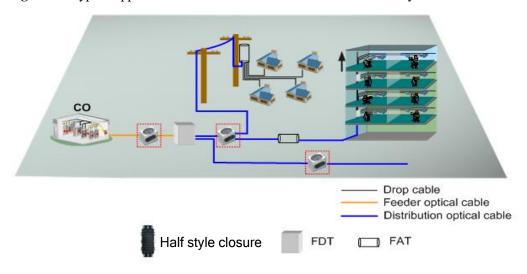


Figure 3-2 shows the wall-mounted installation half style closures.

Figure 3-2 Wall-mounted installation



4 Configurations

4.1 Typical Configurations

The SSC2231 and SSC2232 half style closure series provides different capacities with different number of configured functional modules. Table 4-1 shows typical configurations.

Table 4-1 Typical configurations

Product	Component	Quantity for Full Configurat ion	Capacity	Function
SSC2231-24	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	1	24	Splicing and storing fibers
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	-	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	wall-mounted installation
SSC2231-48A	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members

Product	Component	Quantity for Full Configurat ion	Capacity	Function
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	1	48	Splicing and storing fibers
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	_	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	wall-mounted installation
SSC2231-48	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	2	24	Splicing and storing fibers
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	_	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	Aerial and wall-mounted installation
SSC2231-72	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers

Product	Component	Quantity for Full Configurat ion	Capacity	Function
	Splicing tray	3	24	Splicing and storing fibers
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	_	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	Aerial and wall-mounted installation
SSC2231-96	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	4	24	Splicing and storing fibers
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	_	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	Aerial and wall-mounted installation
SSC2232-72	Cover	1		Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	2	36	Splicing and storing fibers

Product	Component	Quantity for Full Configurat ion	Capacity	Function
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	_	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	Aerial and wall-mounted installation
SSC2232-108	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	3	36	Splicing and storing fibers
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	_	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	Aerial and wall-mounted installation
SSC2232-144	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	4	36	Splicing and storing fibers
	Sealing material	1	_	Sealing the case

Product	Component	Quantity for Full Configurat ion	Capacity	Function
	Grounding device	1	_	Grounding cable armor
	Air valve	1	-	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	Aerial and wall-mounted installation
SSC2232-180	Cover	1	_	Protecting internal parts
	Base	1	_	Securing optical cables and strength members
	Bracket assembly	1	_	Securing cables and storing fibers
	Splicing tray	5	36	Splicing and storing fibers
	Sealing material	1	_	Sealing the case
	Grounding device	1	_	Grounding cable armor
	Air valve	1	_	Detecting the atmospheric pressure inside the closure and pumping air into the closure
	Sealing block	1	_	Sealing unused apertures
	Installation accessories	1	_	Aerial and wall-mounted installation

5 Technical Specifications

5.1 Performance Specifications

Table 5-1 describes the performance specifications of the closure.

 Table 5-1 Performance specifications

Specification		Parameter		
Packing	SSC2231	560 × 230 × 130		
dimensions (H x W x D; mm)	SSC2232	760 ×285 ×195		
Dimensions (H x	SSC2231	533 × 209 × 104		
W x D; mm)	SSC2232	648 ×253.8 ×158		
Weight (Including	SSC2231- 24	3.6		
the accessories; kg)	SSC2231-48A	3.6		
	SSC2231-48	3.6		
	SSC2231-72	3.6		
	SSC2231-96	3.6		
	SSC2232-72	6.55		
	SSC2232-108	6.55		
	SSC2232-144	6.55		
	SSC2232-180	6.55		
Case	Diameter of the optical cables (mm)	Φ 10 mm to Φ 21 mm Φ 16 mm to Φ 25 mm		
	Installation mode	Aerial-mounted installation		
	Material	Composite PP		
	Color	Black		

Specification		Parameter		
Splicing tray	Capacity	24 cores (bundle optical cable)		
		36 cores (bundle optical cable)		
		48 cores (4-core ribbon optical cable)		
	Material	ABS		
Sealing performance		Pressurized up to 100 kPa and no air bubble after 15 minutes under water		
Operating temperature		-30°C to $+60^{\circ}\text{C}(-22^{\circ}\text{F}$ to $+140^{\circ}\text{F})$		
Storage temperature		-40°C to +70°C (-40°F to +158°F)		
Relative humidity		95%		
Atmospheric pressu	re	76 kPa to 106 kPa		

5.2 Standards Compliance

Table 5-2 describes the standards followed by the half style closure.

Table 5-2 Standards compliance

Standard	Description
ITU T L.13 (Partially met)	Performance requirements for passive optical nodes: Sealed closures for outdoor environments

6 Acronyms and Abbreviations

 \mathbf{C}

CO central office

 \mathbf{F}

FAT fiber access terminal

FDT fiber distribution terminal

FTTx fiber to the x

 \mathbf{o}

ODN optical distribution network

OLT optical line terminal