OPTOTEC
by STL

SAMX - SAMr
Product Brochure
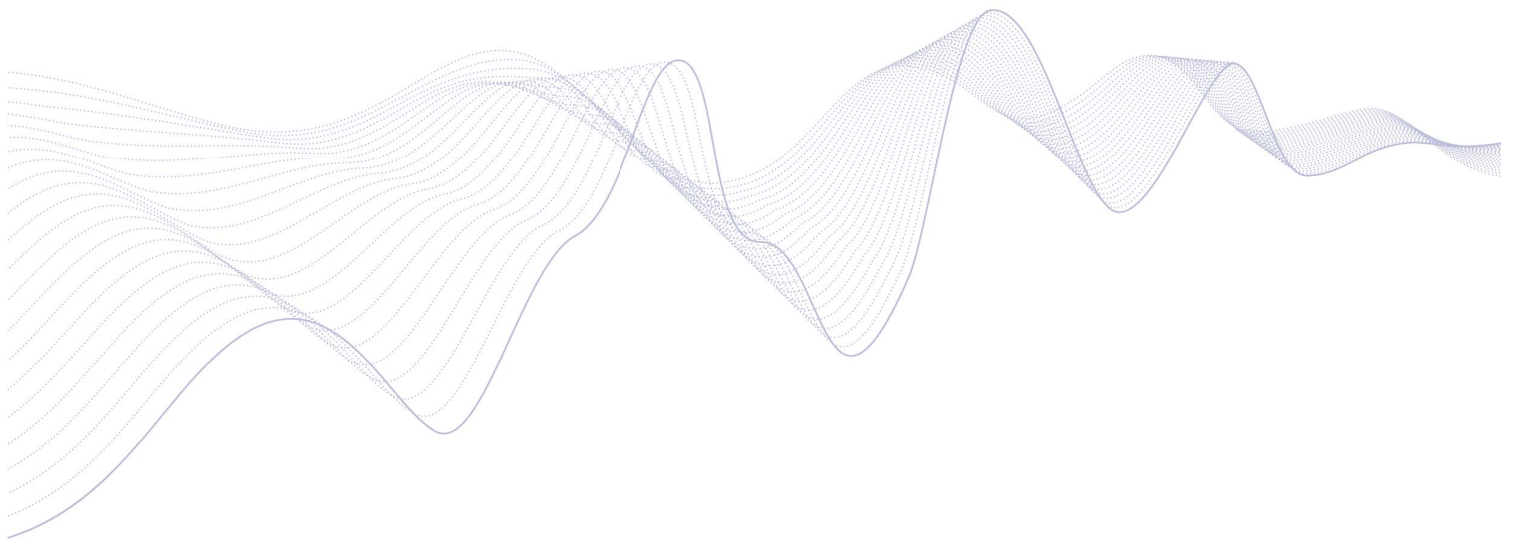
Introduction

The Optotec innovative fiber management system is a modular, complete approach to fiber routing inside FTTH networks.
It goes far beyond offering a catalogue of components or individual building blocks. It is a comprehensive set of integrated products, services, and support to ensure the successful and efficient implementation of a fiber network that will serve as a stable communications infrastructure for many years to come.

Optotec Fiber Management System is included in all our products. It allows the easy and confident installation and storage of bare fibers, avoiding any risk of optical loss in the network.
Cassette pivoting is optimized and tested according to IEC 61300-3-28 in order to guarantee zero transient losses during normal maintenance operations.
Installers love the exclusive design, allowing them to store the extra length of the spliced fibers faster and safely.

Moreover, the cassettes can be browsed without any additional support.
Groove plates can be fixed to suitable aluminium rails (closures) or screwed to backplates (boxes, cabinets, shelves).
The modules (groove plates and cassettes) are delivered unassembled in plastic bags.

It is very easy to snap the cassette onto the groove plate clips: make sure to push them into the hinges perpendicularly! Use the same 90° direction when removing them. We suggest checking the correct installation by moving the cassettes up and down.

Optotec Fiber Management System modularity is the best solution for increasing the capacity and the scalability of every optical network.

Optotec's splicing modules and their trays are essential items, with the Optotec product range based on them. The products offer a fiber management system featuring simplicity, accessibility, reliability and future-proof scalability.

The splicing modules consist of a variable number of trays whose typology changes according to their splice protection holder type and capacity.

There are three different types of Splicing Modules; SAMX and SAMr with a Reduced WAP (or base).

Optotec provides its own products, termination boxes, closures, subracks, etc. complete with modules, depending on the customer's specific needs.
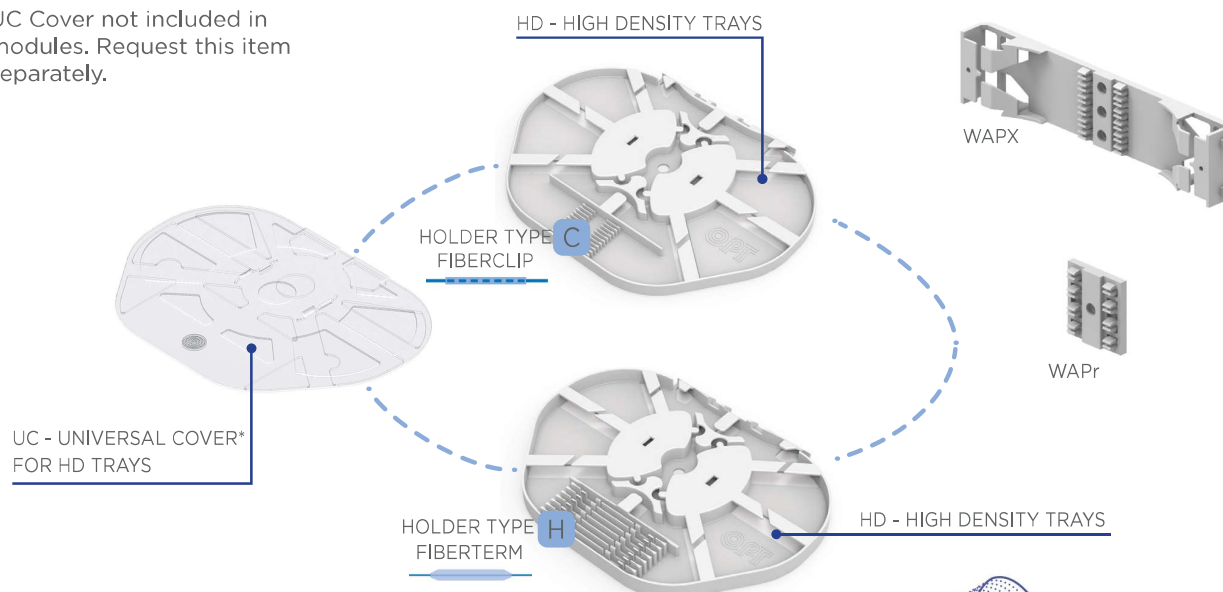
APPLICATION

• Fiber management inside OPTOTEC products
• Hold and protect the splice

TECHNICAL FEATURES

• Loop-Back ability: Yes
• Material: ABS-PC
• Flammability Rating: UL-94 V0
• Colour*: RAL 7035

*other colours available upon request
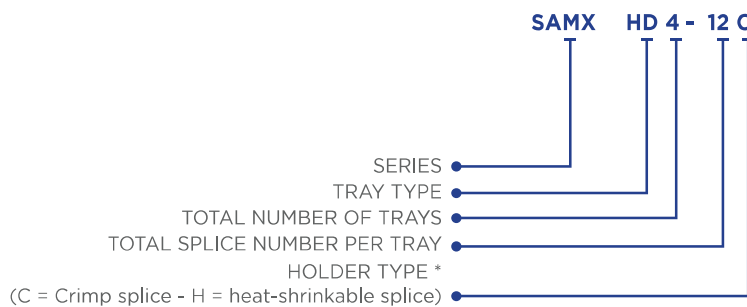
SAMX AND SAMr COMPONENTS

* UC Cover not included in modules. Request this item separately.

HD - HIGH DENSITY TRAYS

HOLDER TYPE C
FIBERCLIP

UC - UNIVERSAL COVER*
FOR HD TRAYS

HOLDER TYPE H
FIBERTERM

HD - HIGH DENSITY TRAYS

WAPX

WAPr

SAMX - HD HIGH DENSITY

SAMX-HD modules are HD (High Density) organizer trays suitable for storing and splicing optical fibers. They are designed to accommodate both standard heat-shrinkable protections and mechanical fiber splice protectors. These trays are provided with a base specifically studied to protect and preserve fiber routing in the cassettes. The groove plate can be secured into some Optotec products (i.e., ODC2) or fixed by screws.
SAMX-HD modules speed up installation time, ensuring flexibility, high density and protection for the fiber management system.

UNDERSTANDING THE OPTOTEC MODULE CONCEPT

SAMX   HD 4 - 12 C

SERIES
TRAY TYPE
TOTAL NUMBER OF TRAYS
TOTAL SPLICE NUMBER PER TRAY
HOLDER TYPE *
(C = Crimp splice - H = heat-shrinkable splice)

HOLDER TYPE H

HOLDER type H is used with fiberterm heat-shrinkable splice protection. Some HD trays with HOLDER type H can arrange up to 3 splice layers (FIBERTERM).
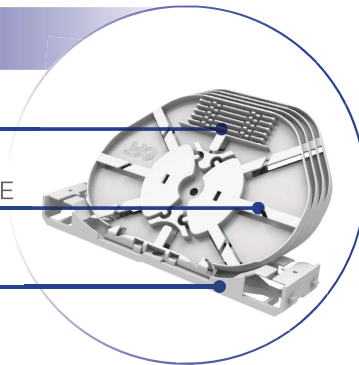
HOLDER TYPE C

HOLDER type C is used with FIBERCLIP mechanical splice protection.

MODULE SAMX HD4-12H

HOLDER H
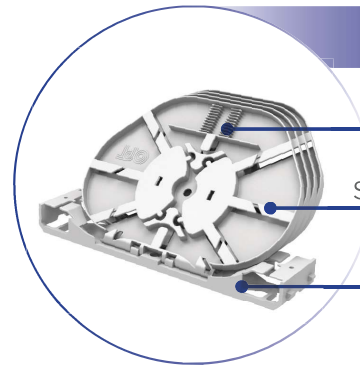
SINGLE TRAY HD TYPE

WAPX

MODULE SAMX HD4-12C

HOLDER C

SINGLE TRAY HD TYPE

WAPX

SAMX HD MODULES SOLD AND RECOMMENDED BY OPTOTEC

REFERENCE PN	DESCRIPTION
SAMX-HD6-8H	Splice Array Module - 6x High Density cassettes with HS holder (8fo splices per cassette - 48fo per module)
SAMX-HD4-12H	Splice Array Module - 4x High Density cassettes with HS holder (6+6fo splices per cassette - 48fo per module)
SAMX-HD4-12C	Splice Array Module - 4x High Density cassettes with ANT holder (12fo splices per cassette - 48fo per module)
SAMX-HD6-12H	Splice Array Module - 6x High Density cassettes with HS holder (12fo splices per cassette - 72fo per module)
SAMX-HD4-12C	Splice Array Module - 6x High Density cassettes with ANT holder (12fo splices per cassette - 72fo per module)
SAMX-HD3-24H	Splice Array Module - 3x High Density cassettes with HS holder (8+8+8fo splices per cassette - 72fo per module)
SAMX-HD4-24H	Splice Array Module - 4x High Density cassettes with HS holder (12+12fo splices per cassette - 96fo per module)
UC-UNIVERSAL COVER	1 Universal Cover to protect 1 High Density cassette belonging to the SAMX and SAMR series

SAMX - HD HIGH DENSITY

FIBERTERM SPLICE

MODULE TYPE SAMX	TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. SPLICES PER MODULE
HD6-8H	6	8H	48
HD6-12H	6	12H	72

FIBERCLIP SPLICE

MODULE TYPE SAMX	TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. SPLICES PER MODULE
HD4-12C	4	12C	48
HD6-12C	6	12C	72

FIBERTERM SPLICE-ARRANGED ON 3 LAYERS

MODULE TYPE SAMX	TRAY PER PACK	SPLICES PER TRAY ARRANGED ON LAYERS	TOTAL NUM. SPLICES PER MODULE
HD3-24H	3	3 LAYERS (8+8+8) total. 24H	72

FIBERTERM SPLICE-ARRANGED ON 2 LAYERS

MODULE TYPE SAMX	TRAY PER PACK	SPLICES PER TRAY ARRANGED ON LAYERS	TOTAL NUM. SPLICES PER MODULE
HD4-12H	4	2 LAYERS (6+6) total. 12H	48
HD4-24H	4	2 LAYERS (12+12) total. 24H	96

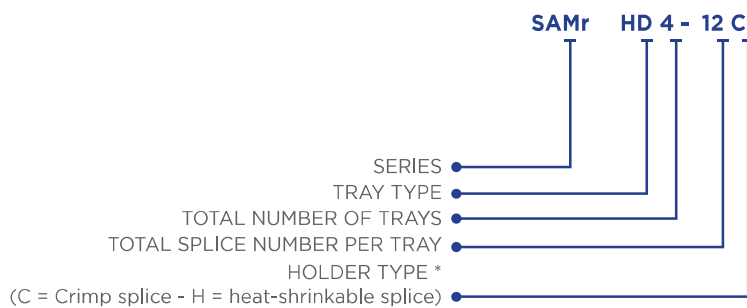## EXAMPLE OF SAMR MODULES INTO OPTOTEC CODC2 AND ODC2 CLOSURES

SAMr - HD HIGH DENSITY

SAMr modules consist of HD type (High Density) organizer trays to store the fibers and splices for either heat-shrinkable protections or mechanical protections.
These trays are mounted on a reduced base that allows to handle many of them in a restricted, well-protected space. SAMr modules are the perfect solution for managing multiple splices in compact fiber optics enclosures like microdc closures, NGB1 box, etc.

UNDERSTANDING THE OPTOTEC MODULE CONCEPT

SAMr HD 4 - 12 C

SERIES
TRAY TYPE
TOTAL NUMBER OF TRAYS
TOTAL SPLICE NUMBER PER TRAY
HOLDER TYPE *
(C = Crimp splice - H = heat-shrinkable splice)

HOLDER TYPE H

HOLDER type H is used with fiberterm heat-shrinkable splice protection. Some HD trays with HOLDER type H can arrange up to 3 splice layers (FIBERTERM).
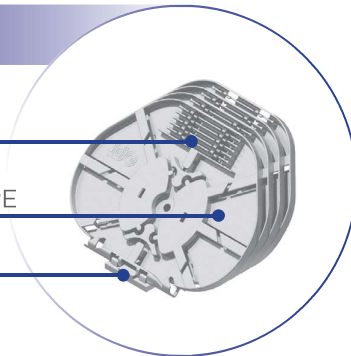
HOLDER TYPE C

HOLDER type C is used with FIBERCLIP mechanical splice protection.

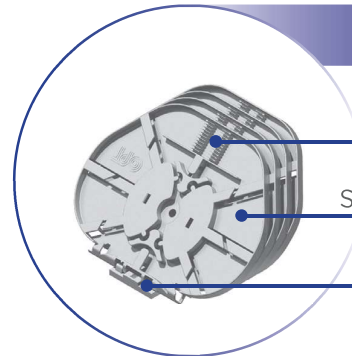**MODULE SAMr HD4-12H**

HOLDER H

SINGLE TRAY HD TYPE

REDUCED WAP

MODULE SAMr HD4-12C

HOLDER C

SINGLE TRAY HD TYPE

REDUCED WAP

SAMr HD MODULES SOLD AND RECOMMENDED BY OPTOTEC

REFERENCE PN	DESCRIPTION
SAMr-HD6-8H	Splice Array Module - 6x High Density cassettes with HS holder (8fo splices per cassette - 48fo per module)
SAMr-HD4-12H	Splice Array Module - 4x High Density cassettes with HS holder (6+6fo splices per cassette - 48fo per module)
SAMr-HD4-12C	Splice Array Module - 4x High Density cassettes with ANT holder (12fo splices per cassette - 48fo per module)
SAMr-HD6-12H	Splice Array Module - 6x High Density cassettes with HS holder (12fo splices per cassette - 72fo per module)
SAMr-HD6-12C	Splice Array Module - 6x High Density cassettes with ANT holder (12fo splices per cassette - 72fo per module)
SAMr-HD3-24H	Splice Array Module - 3x High Density cassettes with HS holder (8+8+8fo splices per cassette - 72fo per module)
SAMr-HD4-24H	Splice Array Module - 4x High Density cassettes with HS holder (12+12fo splices per cassette - 96fo per module)
UC-UNIVERSAL COVER	1 Universal Cover to protect 1 High Density cassette belonging to the SAMX and SAMr series

SAMr - HD HIGH DENSITY

FIBERTERM SPLICE

MODULE TYPE SAMr	TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. SPLICES PER MODULE
HD6-8H	6	8H	48
HD6-12H	6	12H	72

FIBERCLIP SPLICE

MODULE TYPE SAMr	TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. SPLICES PER MODULE
HD4-12C	4	12C	48
HD6-12C	6	12C	72

FIBERTERM SPLICE-ARRANGED ON 3 LAYERS

| MODULE TYPE SAMr	TRAY PER PACK	SPLICES PER TRAY ARRANGED ON LAYERS	TOTAL NUM. SPLICES PER MODULE
HD3-24H	3	3 LAYERS (8+8+8) total. 24H	72

FIBERTERM SPLICE-ARRANGED ON 2 LAYERS

MODULE TYPE SAMr	TRAY PER PACK	SPLICES PER TRAY ARRANGED ON LAYERS	TOTAL NUM. SPLICES PER MODULE
HD4-12H	4	2 LAYERS (6+6) total. 12H	48
HD4-24H	4	2 LAYERS (12+12) total. 24H	96

EXAMPLE OF SAMr MODULES INTO OPTOTEC MICRODC AND MAX CLOSURES
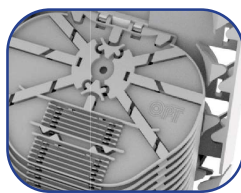
SAMX - HD HIGH DENSITY
RIBBON

These products offer a fiber management system featuring simplicity, accessibility, reliability and future-proof scalability. The splice modules contain a variable number of cassettes whose capacity is determined by the splice holders contained therein.
Fully compatible Optotec single fiber splice modules portfolio, IBR cassettes can be supplied in different colours according to the fiber bundled binder for identification purpose.
The best flexible solution for every network design and installation. Some cassettes are compatible and available with WAP reduced system for micrODC and MAX closures.
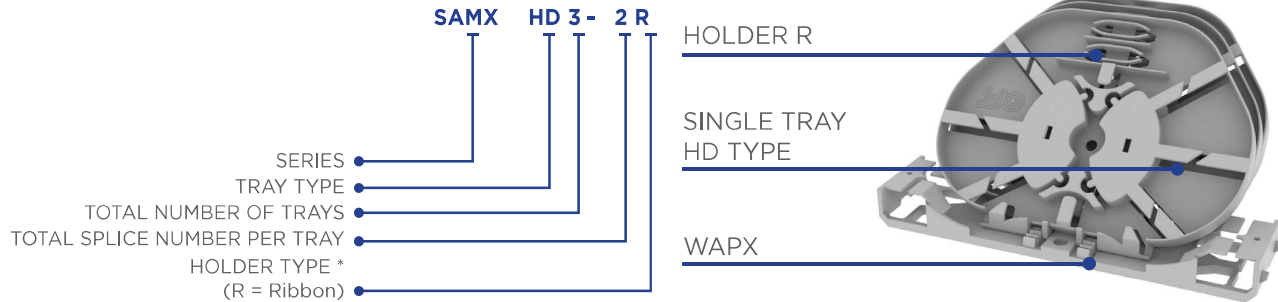
2R and 3R: High capacity IBR-IBR "Splice and Forget" cassettes

- 2x IBR Splice Protectors per SE cassette.
- 3x IBR Splice Protectors and 12x single fibre heat-shrinkable Splice Protectors.
  This solution allows to carry out maintenance and disaster
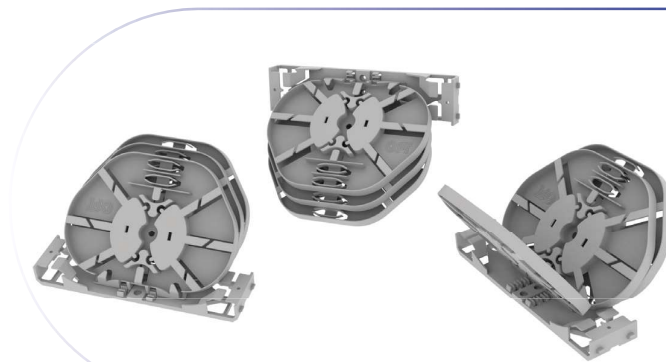 repair on IBR modules.

R/R: Double density IBR splice solution

- Ideal where IBR reaches the access network.
- 1 IBR/Element per tray for unambiguous binder identification.
- Same thickness as SE single element trays (8mm).

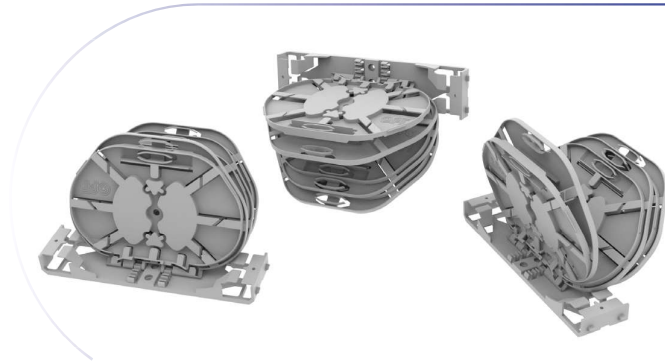## UNDERSTANDING THE OPTOTEC MODULE CONCEPT

SAMX HD 3 - 2 R

SERIES
TRAY TYPE
TOTAL NUMBER OF TRAYS
TOTAL SPLICE NUMBER PER TRAY
HOLDER TYPE *
(R = Ribbon)

HOLDER R

SINGLE TRAY
HD TYPE

WAPX

MODULE TYPE: SAMX-HD3-2R

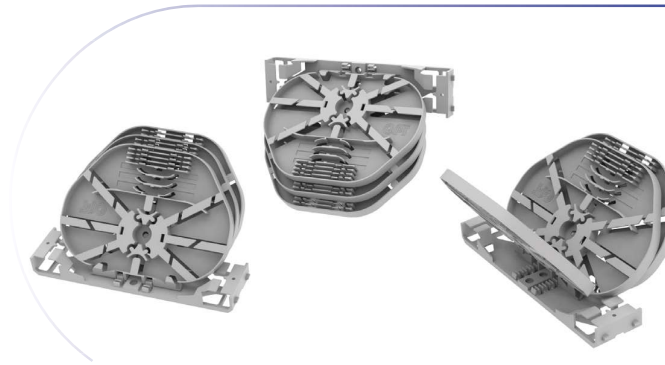| TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. SPLICES PER MODULE	TOTAL RIBBON FO SPLICED PER MODULE
3	2R	6R	72

SAMX - HD HIGH DENSITY
RIBBON

MODULE TYPE: SAMX-HD3-R/R

TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. SPLICES PER MODULE	TOTAL RIBBON FO SPLICED PER MODULE
3	R+R	6R	72

MODULE TYPE: SAMX-HD3-3R-12H

TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. SPLICES PER MODULE	TOTAL RIBBON FO SPLICED PER MODULE
3	3R+12H	9R+36H	108

SAMX HD RIBBON MODULES SOLD AND RECOMMENDED BY OPTOTEC
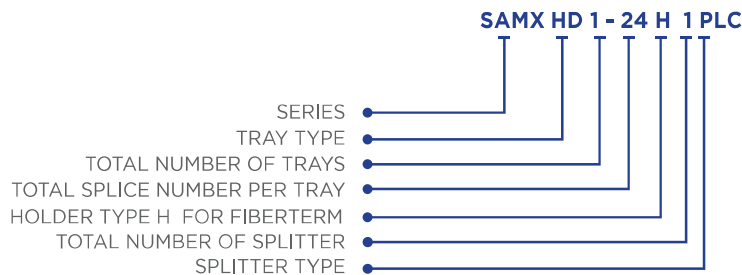
REFERENCE PN	DESCRIPTION
SAMX-HD3-R/R	Splice module consisting of a WAPX and 3 HD twin trays with 1 IBR splice holder each max capacity (12+12) x 3 = 72fo
SAMX-HD3-2R	Splice module consisting of a WAPX and 3 HD trays with IBR splice holder (2 IBR per tray) max capacity (12+12)x3=72fo
SAMX-HD3-3R-12H	Splice module consisting of a WAPX and 3 HD trays with IBR and HS splice holder (3 IBR and 12 HS per tray) Max capacity (12+12+12) x 3 = 108 fo
UC-UNIVERSAL COVER	1 Universal Cover to protect 1 High Density cassette belonging to the SAMX and SAMR series

SAMX - HD HIGH DENSITY
WITH PLC SPLITTER

The SAMX High Density module solution includes trays with Higher Density splice capacity, for heat-shrinkable splice protections also with PLC splitter.
The High Density of the modules allows to increase the fiber capacity in Optotec products, ensuring the correct radius bend and the total control of system fibre management. The Modules consist of trays anchored on WAPX. High Quality, total modularity and easy installation at any point of the network. All the tray packs are also available in the WAPr reduced version to be installend inside micrODC or MAX closures.

UNDERSTANDING THE OPTOTEC MODULE CONCEPT

SAMX HD 1 - 24 H 1 PLC

SERIES
TRAY TYPE
TOTAL NUMBER OF TRAYS
TOTAL SPLICE NUMBER PER TRAY
HOLDER TYPE H FOR FIBERTERM
TOTAL NUMBER OF SPLITTER
SPLITTER TYPE

PLANAR LIGHTWAVE CIRCUIT (PLC) SPILTTER
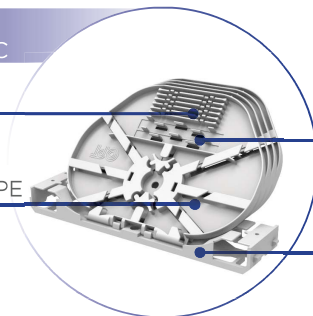

MODULE
SAMX HD4-12H-2PLC

HOLDER H

SINGLE TRAY HD TYPE

PLC HOLDER

WAPX

SAMX HD MODULES WITH PLC SPLITTER SOLD AND RECOMMENDED BY OPTOTEC

REFERENCE PN	DESCRIPTION
SAMX-HD3-18H-1PLC	Module with 3 trays: 1 splitter capacity and up to 18 fiberterm per tray - without Universal Cover. Total splices per module: up to 54.
SAMX-HD1-18H-1PLC	Module with 1 tray: 1 splitter capacity and up to 18 fiberterm per tray - without Universal Cover. Total splices per module: up to 18.
SAMX-HD3-12C-2PLC	Module with 3 trays: 2 splitter capacity and up to 12 fiberclip per tray - without Universal Cover. Total splices per module: up to 36.
SAMX-HD3-12C-2PLC	Module with 3 trays: 2 splitter capacity and up to 12 fiberclip per tray - without Universal Cover. Total splices per module: up to 36.
SAMX-HD4-12H-2PLC	Module with 4 trays: 2 splitter capacity and up to 12 fiberterm per tray - without Universal Cover. Total splices per module: up to 48.
SAMX-HD1-12C-2PLC	Module with 1 tray: 2 splitter capacity and up to 12 fiberclip per tray - without Universal Cover. Total splices per module: up to 12.
UC-UNIVERSAL COVER	1 Universal Cover to protect 1 High Density cassette belonging to the SAMX and SAMr series

FIBERTERM SPLICE AND PLC SPLITTER

MODULE TYPE SAMX	TRAY PER PACK	SPLICES PER TRAY	TOTAL NUM. PLC PER MODULE	HELD SPLITTER SIZES	TOTAL NUM. SPLICES PER MODULE
HD3-18H-1PLC	3	≡ 3 LAYERS (6+6+6) total 18H	3	4x7x50 mm	54
HD1-18H-1PLC	1	≡ 3 LAYERS (6+6+6) total 18H	1	4x7x50 mm	18
HD4-12H-2PLC	4	═ 2 LAYERS (6+6) total 12H	8	4x7x50 mm and 4x4x40mm	48
HD1-12C-2PLC	1	— 1 LAYER (6+6) total 12C	2	4x7x50 mm	12
HD3-12C-2PLC	3	— 1 LAYER (6+6) total 12C	6	4x7x50 mm	36

COMPATIBLE BARE FIBER SPLITTER SIZES

4x4x40 mm (type n:2, n:4, n:8)   7x4x50 mm (type n:16 and n:32)

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About STL - Sterlite Technologies Ltd

STL is an industry-leading integrator of digital networks.

We design and integrate these digital networks for our customers. With core capabilities in Optical Interconnect, Virtualized Access Solutions, Network Software and System Integration, we are the industry's leading end-to-end solutions provider for global digital networks. We partner with global telecom companies, cloud companies, citizen networks and large enterprises to deliver solutions for their fixed and wireless networks for current and future needs. We believe in harnessing technology to create a world with next-generation connected experiences that transform everyday living. With an intense focus on end-to-end network solutions development, we conduct fundamental research in next-generation network applications at our Centre of Excellence. STL has a strong global presence with next-gen optical preform, fiber and cable manufacturing facilities in India, Italy, China and Brazil, optical interconnect capabilities in Italy, along with two software-development centres across India and one data centre design facility in the UK.