

Ixia Flex Tap™

PASSIVE NETWORK MONITORING

The Ixia Flex Tap™ provide reliable continuous visibility of 100% of network traffic to support performance and security with no network performance degradation or disruption.

Flex Taps are flexible and scalable, each Tap in the family is modular, can supports speeds up to 100G, and is 100 percent passive. Flex Taps are available in multimode and single mode fiber varieties with split ratios ranging from 50/50 up to 90/10. Depending on the model, the Flex Tap is available with either LC or MTP (MPO) connectors. Up to 36 taps can be deployed in a single 1U 19inch rack space.

The design of the Flex Tap is optimized and tested for high-performance fiber networks ranging from 1G to 100G. Flex Taps are deployed at any inline connection on the network, therefore no additional overhead or management burden is added to the network devices to copy traffic for the monitoring/security infrastructure. The Flex Tap is compatible with all major manufacturers' monitoring devices, including protocol analyzers, probes, and intrusion detection systems, and is protocol agnostic.

KEY FEATURES

- Low insertion loss – minimize impact on data flows
- Flex Tap is fully passive – monitoring infrastructure does not impact network availability
- Does not modify traffic – tools see real copies of the packets from the network
- High density – Save valuable rack real estate
- Cost effective – avoid costly expenses managing SPAN ports



Ixia Flex Taps in RK-FLEX-24 Rack

HIGHLIGHTS

- Highly reliable fiber optic Tap technology
- Deploy up to 36 Taps in 1U
- Supports network speeds from 1G to 100G
- Available in multimode and single mode fiber models
- Cisco 40G BiDi Tap model available
- Choice of standard size rack mount (up to 36 taps) or mini-chassis which is one third width – ideal for desk top or space constrained deployments
- Passes all full-duplex traffic (including errors) from all layers
- Non-disruptive and transparent
- 40G SR4 MTP model can be used as one 40/100G SR4 tap or 4 x 10G taps
- 100G MTP model can be used as one 100G (SR10) tap or 12 x 10G taps
- Requires no power and does not have an IP address, providing safety from remote attacks
- Black and tan LC connectors denote multimode fiber for network monitoring
- Color coded in blue and green for easy port monitoring on LC connectors in single mode fiber
- 40G and 100G Multimode MTP models include monitor port Y-Cable

FLEX TAP FAMILIES



FLEX TAP LC



FLEX TAP MTP



FLEX TAP BiDi



FLEX TAP SECURE+



FLEX TAP VHD

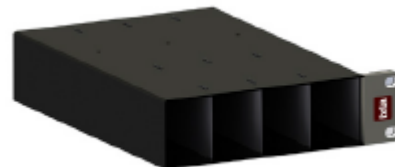


FLEX TAP UHD

RACK OPTIONS

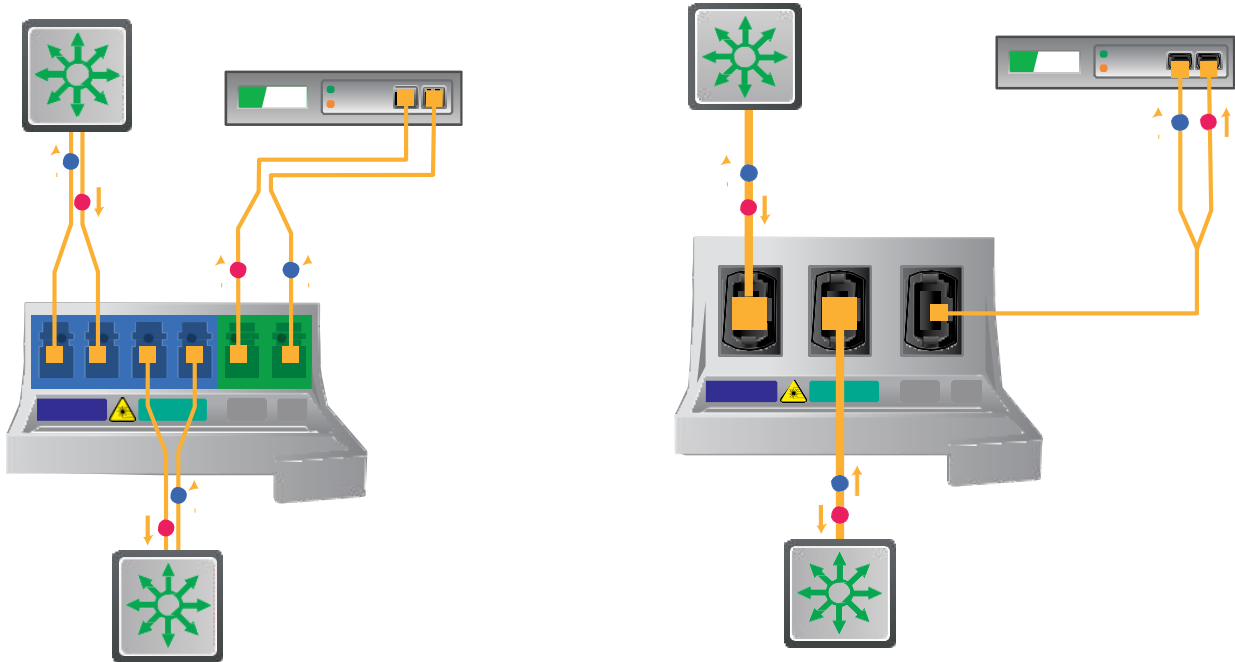


ASSEMBLY RACK CHASSIS – RK-FLEX-24



MINI CHASSIS – RK-FLEX-8

TAP DEPLOYMENT



LC Tap Deployment

MTP Tap Deployment

SPECIFICATIONS

SPECIFICATIONS	
Operating	<ul style="list-style-type: none"> Operating Temperature: 0° to 40°C Storage Temperature: -10° to 70°C Relative Humidity: 10% min, 95% max, non-condensing
Mechanical	Standard Rack Dimensions: 1.7" High x 8.4" Deep x 19" Wide Mini Rack Dimensions: 1.7" High x 8.4" Deep x 5.7" Wide
Certifications	<ul style="list-style-type: none"> Fully RoHS-compliant Safety Certifications: UL, CSA, CB

STANDARD MODELS - LC		
	LC Models	Cisco BiDi Model
Mechanical	1.6" High x 7.8" Deep x 0.7" Wide	
Fiber Specs	Multimode: 62.5/125µm; 850nm 50/125µm; 850nm Supports speeds of 1G and 10G	Single Mode: 8.5/125µm; 1310nm/1550nm Supports speeds of 1G, 10G, 25G, 40G, and 100G
Connectors	<ul style="list-style-type: none"> • Network Ports: 2 x Duplex LC • Monitoring Ports: 1 x Duplex LC 	<ul style="list-style-type: none"> • Network Ports: 2 x Duplex LC per tap • Monitoring Ports: 2 x Duplex LC per tap

STANDARD MODELS - MTP	
Mechanical	1.6" High x 10.1" Deep x 1.3" Wide
Fiber Specs	50/125µm OM4; 850nm Supports speeds of 10G, 40G/100G* *40G & 100G are supported for SR4 models
Connectors	Network Ports: 2 x MTP (MPO); 12 Fiber or 24 Fiber Monitoring Ports: 1 x MTP (MPO); 12 Fiber or 24 Fiber

VHD MODELS - LC		
Mechanical	1.6" High x 10.1" Deep x 1.3" Wide	
Fiber Specs	Multimode: 62.5/125µm; 850nm 50/125µm; 850nm Supports speeds of 1G and 10G	Single Mode: 8.5/125µm; 1310nm/1550nm Supports speeds of 1G, 10G, 40G, and 100G

VHD MODELS - LC	
Connectors	<ul style="list-style-type: none"> • Network Ports: 6 x Duplex LC • Monitoring Ports: 3 x Duplex LC

UHD MODELS - MTP	
Mechanical	1.6" High x 10.1" Deep x 1.3" Wide
Fiber Specs	50/125µm OM4; 850nm Supports speeds of 10G, 40G/100G*, and 100G** *40G & 100G are supported for SR4 models and **100G for SR10 multimode optics
Connectors	<ul style="list-style-type: none"> • Network Ports: 2 x MTP (MPO); 12 Fiber or 24 Fiber • Monitoring Ports: 1 x MTP (MPO); 12 Fiber or 24 Fiber

INSERTION LOSS (NETWORK / MONITOR)					
	50/50	60/40	70/30	80/20	90/10
1/10/25/40/100G SM (LC & VHD)	3.7db / 3.7db	2.8 dB/ 4.8 dB	2.0 dB/ 6.1 dB	1.3 dB/ 8.0 dB	0.8 dB/ 12.0 dB
1G MM (LC)	4.5 dB/ 4.5 dB	3.1 dB / 5.1 dB	2.4 dB / 6.3 dB	1.8 dB/ 8.1 dB	1.3 dB / 11.5 dB
10G MM (LC & VHD)	3.9 dB / 3.9 dB	2.9 DB / 4.9 DB	2.2 dB / 6.1 dB	1.6 DB / 7.9 dB	-
40G MM (BiDi)	4.1 dB / 4.1 dB	-	-	-	-
4x10/40/100G MM (MTP SR4)	4.4 dB / 4.4 dB	-	2.6 dB / 6.6 dB	-	-
12x10/40/100G MM (MTP SR10)	4.4 dB / 4.4 dB	-	2.6 dB / 6.6 dB	-	-
1/3x100G/3x40G /12x10G	4.4 dB / 4.4 dB	-	2.6 dB / 6.6 dB	-	-

INSERTION LOSS (NETWORK / MONITOR)						
4x10/40/100G MM UHD (MTP SR4)	4.4 dB / 4.4 dB	-		2.6 dB / 6.6 dB	-	-
12x10/40/100G MM UHD (MTP SR10)	4.4 dB / 4.4 dB	-		2.6 dB / 6.6 dB	-	-

ORDERING INFORMATION

MODEL	CN	TYPE/ DIAMETER (UM)	TAPS IN 1U	SPEED GBPS	SPLIT RATIO PART NUMBERS	NETWORK CABLES TO USE	Y CABLE KITS TO USE
Std	LC	SM 8.5um	1-24	1,10 25,40 100GB	50/50: TP-100-LR-85-50 ^b 60/40: TP-100-LR-85-60 ^b 70/30: TP-100-LR-85-70 ^b 80/20: TP-100-LR-85-80 ^b 90/10: TP-100-LR-85-90 ^b	In Y cable kit	705-0014-001
Std	LC	MM 62um	1-24	1 GB	50/50: TP-1-SX-62-50 60/40: TP-1-SX-62-60 70/30: TP-1-SX-62-70 80/20: TP-1-SX-62-80 90/10: TP-1-SX-62-90	In Y cable kit	705-0013-001
Std	LC	MM 50um	1-24	1 GB	50/50: TP-1-SX-50-50 60/40: TP-1-SX-50-60 70/30: TP-1-SX-50-70 80/20: TP-1-SX-50-80 90/10: TP-1-SX-50-90	In Y cable kit	705-0012-001
Std	LC	MM 50um	1-24	1,10 GB	50/50: TPX-10-SR-50-50 60/40: TPX-10-SR-50-60 70/30: TPX-10-SR-50-70 80/20: TPX-10-SR-50-80 90/10: TPX-10-SR-50-90	In Y cable kit	705-0012-001

MODEL	CN	TYPE/ DIAMETER (UM)	TAPS IN 1U	SPEED GBPS	SPLIT RATIO PART NUMBERS	NETWORK CABLES TO USE	Y CABLE KITS TO USE
Cisco BiDi	LC	MM 50um	1-12	40 GB	50/50: TPX-40-SR-50-50-BD	Standard x 2	Use standard duplex
Std LX4	LC	MM 50um	1-24	40 GB	70/30: TP-40-SR-50-70-MR4	In Y cable kit	705-0012-001
Std MTP	MTP	MM 50um	1-12	40 GB SR4	50/50: TPX-40-SR-50-50-MTP ^a 70/30: TPX-40-SR-50-70-MTP ^a	MTP – MTP x 2	Included with tap – spare is - 705-0027-001
Secure+	LC	SM 8.5um	1-24	1,10 GB	50/50: TPS-100-LR-85-50	In Y cable kit	705-0014-001
VHD	LC	SM 8.5um	1-36	1, 10 25, 40 100GB	50/50: TPVHD-100-LR-85-50 ^b 70/30: TPVHD-100-LR-85-70 ^b	In Y cable kit	705-0014-001 x 3
VHD	LC	MM 50um	1-36	1,10 GB	50/50: TPVHD-10-SR-50-50 70/30: TPVHD-10-SR-50-70	In Y cable kit	705-0012-001 x 3
UHD	MTP	MM 8.5um	1, 36 or 144	1,10 40,100 GB (SR/SR 4/SR10)	50/50: TPUHD-100-SR-50-50-M ^c 70/30: TPUHD-100-SR-50-70-M ^c	CKT-MTP-12LC-50-OM4 x 2 or CKT-MTP-3MTP-50-OM4 x 2 or MTP to MTP x 2	CKT-MTP-24LC-50-OM4 or CKT-MTP-6MTP-50-OM4 or CKT-MTP-2MTP-50-OM4

Table Notes:

Y cable kits for LC taps contain 2 x network and 1 x Y cables

a These taps are primarily designed for use in 4 lane MM fiber installations – eg. QSFP+ or QSFP28.

b These taps can be used in SM 1G (SFP), 10G (SFP+), 40G (QSFP+) or 100G (QSFP28) applications

c Each tap can tap either 12 MM LC links at 1/10G, 3 MM MTP based SR4 links at 40G/100G or a single SR10 link at 100G

CABLES AND ACCESSORIES

705-0012-001

Cable Assembly Kit, LC/LC, 1G/10G, MM, 50um OM3, 3m long cables. Includes 2 straight through cables and one Y cable. Used to install fiber taps. (955-8100)

705-0013-001

Cable Assembly Kit, LC/LC 1G/10G, MM, 62.5um 3m long cables. Includes 2 straight through cables and one Y cable. Used to install fiber taps. (955-8101)

705-0014-001

Cable Assembly Kit, LC/LC 1G/10G, SM, 8.5um 3m long cables. Includes 2 straight through cables and one Y cable. Used to install fiber taps. (955-8102)

705-0015-001

Cable Assembly Kit, LC/SC 1G/10G, MM, 50um OM3, 3m long cables. Includes 2 straight through cables and one Y cable. Used to install fiber taps. LC at tap end and SC at remote end. Allows LC taps to be used with SC fiber infrastructure (955-8103)

705-0016-001

Cable Assembly Kit, LC/SC 1G/10G, MM, 62.5um 3m long cables. Includes 2 straight through cables and one Y cable. Used to install fiber taps. LC at tap end and SC at remote end. Allows LC taps to be used with SC fiber infrastructure (955-8104)

705-0017-001

Cable Assembly Kit, LC/SC 1G/10G, SM, 8.5um 3m long cables. Includes 2 straight through cables and one Y cable. Used to install fiber taps. LC at tap end and SC at remote end. Allows LC taps to be used with SC fiber infrastructure (955-8105)

705-0027-001

Cable Assembly Kit, MTP/MTP, MM, OM4, 50um 3m long cables. Includes 2 MTP Type B "reversed" cables (each with 12 fiber strands - single row - only 8 used with tap) and one Y cable with 8 fibers. Female connectors. Used to install fiber taps in 40G (QSFP+) and 100G (QSFP28) infrastructure. Note Ixia MTP taps already have Y cables included. (955-8106)

CKT-LC-LC-50-OM4

Cable Assembly Kit, LC/LC, 1G/10G, MM, OM4, 50um 3m long cables. Includes 2 straight through cables and one Y cable. Used to install fiber taps in OM4 fiber infrastructure (955-8117)

CKT-MTP-4LC-50-OM4

Cable Breakout Kit, MTP to 4 LCs, MM, 50um, OM4 3m long. Used to tap 4 1G/10G network links using a single MTP based tap. Also can be used on 40G QSFP+ links if 4 x 10G lanes in use on independent fiber strands via LC connectors. Populated with 8 fiber strands. Female MTP connector. (955-8115)

CKT-MTP-12LC-50-OM4

Cable Breakout Kit, MTP to 12 LCs, MM, 50um, OM4 3m long. Used to tap 12 1G/10G network links using a single MTP based tap. Also can be used on 3 40G QSFP+ links if 4 x 10G lanes in use on independent fiber strands via LC connectors, or can be used on 3 100G QSFP28 links if 4 x 10G lanes in

use on independent fiber strands via LC connectors, or can be used on a single 1 100G CFP links if 10 x 10G lanes in use on independent fiber strands via LC connectors. Populated with 24 fiber strands. Female MTP connector (955-8117)

CKT-MTP-4LC-85-LR

Cable Breakout Kit, MTP to 4 LCs, SM, 8.5um, 3m long. Used to tap 4 1G/10G network links using a single MTP based tap. Also can be used on 40G QSFP+ links if 4 x 10G lanes in use on independent fiber strands via LC connectors. Populated with 8 fiber strands. Female MTP connector. (955-8162)

CKT-MTP-12LC-85-LR

Cable Breakout Kit, MTP to 12 Duplex LCs, SM, 8.5um, 3m long. Used to tap 12 1G/10G network links using a single MTP based tap. Also can be used on 3 40G QSFP+ links if 4 x 10G lanes in use on independent fiber strands via LC connectors, or can be used on 3 100G QSFP28 links if 4 x 10G lanes in use on independent fiber strands via LC connectors, or can be used on a single 1 100G CFP links if 10 x 10G lanes in use on independent fiber strands via LC connectors. Populated with 24 fiber strands. Female MTP connector (955-8176)

CKT-MTP-3MTP-50-OM4

Cable Breakout Kit, MTP (24 fiber) to 3 MTPs (12 fiber), MM, 50um, OM4, 3m long. Can be used on 3 x 40G QSFP+ links or 3 x 100G QSFP28. (955-8181)

Standard MTP-MTP cable

MTP (24 pin) to MTP (24-pin), Type B Polarity, MM, 50um. MTP (24 pin) to MTP (24-pin), Type B Polarity, MM, 50um

CKT-MTP-24LC-85-LR

Cable Breakout Kit, MTP to 24 Simplex LCs, SM, 8.5um, 3m long. Used to connect to the monitor port output of the Flex Tap UHD Single Mode. (955-8177)

CKT-MTP-24LC-50-OM4

Cable Breakout Kit, MTP to 24 Simplex LCs, MM, 50um, OM4, 3m long. Used to connect to the monitor port output of the Flex Tap UHD multimode. (955-8180)

CKT-MTP-6MTP-50-OM4

Cable Breakout Kit, MTP (24 fiber) to 6 MTPs (12 fiber), MM, 50um, OM4, 3m long. Used for the monitor port output of the Flex Tap UHD Multimode, can be used for 3 x 40G QSFP+ links or 3 x 100G QSFP28. (955-8182)

CKT-MTP-2MTP-50-OM4

Cable Breakout Kit, MTP to 2MTP Y cable, MM, 50um, OM4. Use to connect a MM UHD tap to two tool monitoring ports when a single 100G SR10 (CFP) based link is being tapped. One is required per UHD tap deployment (955-8146)

RK-FLEX-24

Assembly rack Chassis, Flex Tap. Holds 24 Flex Taps modules, or up to 36 VHD Flex Taps in a 12-slot unit. Note that MTP, VHD, and UHD Tap modules are double-wide and take up two slots.

RK-FLEX-8

Assembly rack Mini Chassis, Flex Tap, holds 8 Flex Tap modules, or up to 12 VHD Flex Taps in a 4-slot unit. Note that MTP, VHD, and UHD Tap modules are double-wide and take up two slots. Rack Mountable or desk top use. Includes 1 flex tap spacer unit (RK_FLEX-SPACER).

RK-FLEX-SPACER

Flex Tap spacer unit. (RK-FLEX-SPACER)

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