

- **Managed Gigabit Ethernet switch - 10 optical ports**
- **2 combo ports 1000Base-BX/FX or 100Base-BX/FX (SFP) or 10/100/1000 Base-TX**
- **8 optical ports 100Base-FX or 100Base-BX-D**



#### DESCRIPTION

This 10-port Ethernet switch associated with IFOTEC media converters allows to concentrate signals from Ethernet links (IP cameras, subscriber CPE, ...) over optical fibre.

The switch is equipped with 2 combo ports Gigabit Ethernet copper / fiber for connection to the networks (WAN) and 8-port 100Base-BX compatible with IFOTEC media converters, switches and CPEFibre.

The Gigabit link allows to connect 8 or 9 Fast Ethernet equipment like the media converters HXDF 318190 without contention.

The WAN access is ensured by SFP, Gigabit or Fast Ethernet optical modules and 10/100/1000Base-TX copper ports, which enables to interconnect with any type of equipment.

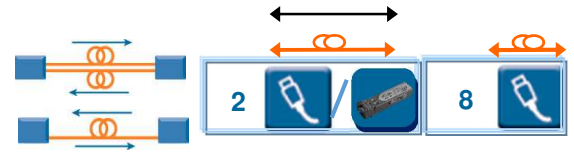
The second Gigabit Ethernet port offers several possibilities:

- Stacking switches to concentrate up to tens 100Base-BX Ethernet accesses
- To connect to the network via switches / routers Gigabit

The product is used for various applications:

- **Video surveillance over IP**
- **Extending Ethernet networks**
- **Very high-speed broadband access**
- **Sensor networks**

The managment allows configuration of the product and diagnosis remote link state.  
This equipment is available in 19" 1U with integrated power supply.



#### MAIN FEATURES

- Managed Ethernet concentration switch :
  - 8 optical ports 100Base-BX-U
  - 2 combo ports Gigabit 10/100/1000Base-TX or GbE SFP, compliant with single mode or multimode fibres
- 32 VLANs 802.1q
- QinQ (double-tag) : 802.1q and 802.1ad (configurable)
- QoS : Port priority, DSCP, VLANs priority (802.1p)
- Port bite rate limitation
- IGMP Snooping V1/V2 with VLANs management
- Secured loop configuration : RSTP
- Stackable compatible with secured loop
- Web (http) and Telnet advanced management functions, SNMP monitoring
- Update of configuration files and firmware through DHCP at product start
- Optical Ethernet link aggregation equipment that can be installed in an outdoor cabinet (neither heated nor refrigerated).
- Rack 19" 1U faible consommation (<15W)  
Alimentation secteur intégrée 85-260 VAC.
- Place of production and service : Voiron (France)
- Product Warranty: 3 years with IFOTEC SFP

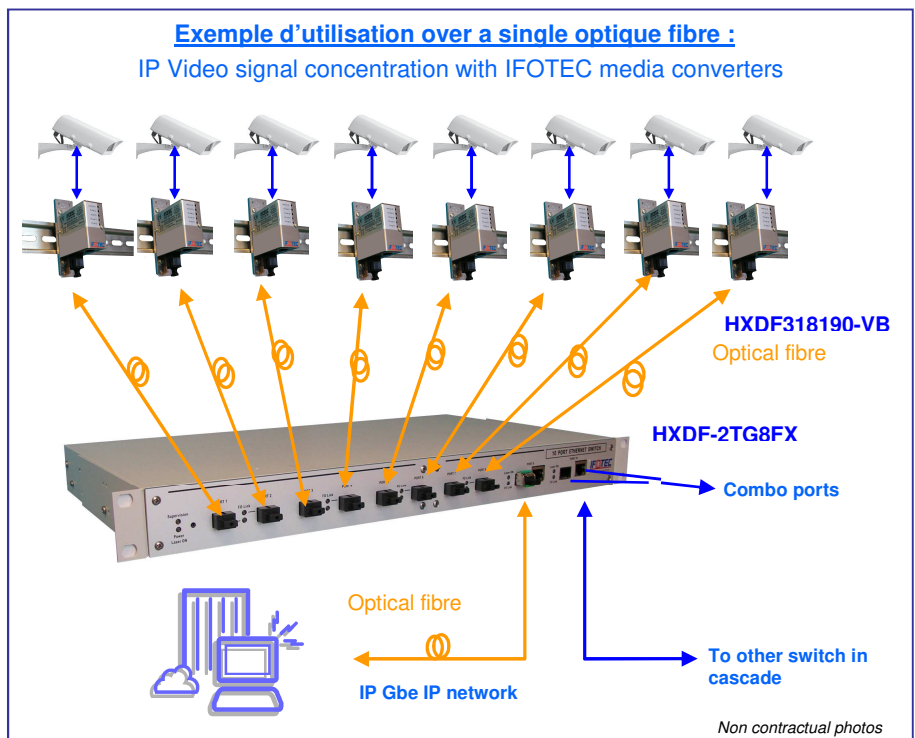
#### Typical reference

**HXDF 558 12S-2TG8FX-IV1**  
Managed Switch – 2 Gigabit ports – 8 Fast Ethernet ports - 1 MMF or 1 SMF - Rack 19" 1U, 230VAC.

*Les modules SFP doivent être commandés séparément, voir tableau de codification adapté.*

#### Contact :

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**Signal specifications**

LAN connection, IP video signals		Combo Ports for Gigabit Ethernet WAN Access			
		Ports fibre		Port Cuivre	
Access type	100 Mbit/s optical port	Access type	Gigabit Ethernet ports	Standard	IEEE 802.3
Number of port	8	Interfaces	Ports for SFP modules	Number of interface	2 ports combo
Protocole	100Base-BX-D (1 OF)	Number of port	2 combo ports	Half/Full duplex configuration	Auto-negotiated
Rate	100Base-FX (2 OF)	Transmission protocol	1000Base-SX (MMF)	10/100/1000Mb/s	Auto-negotiated
Optical fibres	100Mb/s Compliant with single mode or multimode fibres	Ethernet rate	1000Base-LX (SMF)	Ethernet rate	Auto MDI/MDIX
			1000Base-BX (SMF)	Port line crossing	
			1000 Mb/s		

**Optical specifications**

LAN connection, IP video signals		Combo Ports for Gigabit Ethernet WAN Access			
Number of fibre	1 OF by access		1 OF by access		One or two optical fibres, single mode or multimode, according to the SFPs used.
	Multimode (50/125 et 62.5/125)	Single momode (9/125)	Multimode (50/125 et 62.5/125)	Single momode (9/125)	
Optical fibre (µm)					Possibility to replace Gigabit Ethernet SFPs with Fast Ethernet SFPs according to network and applications (eg 9th port).
Optical budget	15 dB	15 dB	15 dB	15 dB	
Emitted wavelength (λ) Distance (Note 1)	1550 nm 5 km (Note2)	1550 nm 10 km	1310nm 5 km	1310 nm 30 km	

Notes 1 Distances can change with the fibre type and the network and can be limited because of the bandwidth.  
2 Distance for a multimode fibre of >500Mhzxkm @1310nm bandwidth

**Supervision (Note 3)**

<ul style="list-style-type: none"> <li>Management BY Web (http) page and Telnet. SNMP monitoring</li> <li>32 VLANs 802.1q</li> <li>QinQ (double-tagging) : 802.1q and 802.1ad (configurable)</li> </ul>	<ul style="list-style-type: none"> <li>QoS : Port priority, DSCP, VLANs priority (802.1p)</li> <li>Port bite rate limitation</li> <li>IGMP Snooping V1/V2 with VLANs management, RSTP (Note 4)</li> </ul>
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Notes 3: For detailed supervision functions please contact us  
4: Features under development. Update firmware possible remotely

**Indicators**

- Link/Act : Ethernet link indicator and traffic indicator

**Connector type**

WAN access: LC/PC or depending on SFP used  
LAN access: SC/PC  
Power access : CE22 base with 2.5m long power cord provided

**Power supply**

Supply voltage: 85 to 260 VAC, power cord provided  
Power consumption : 15VA max

**Housing**

Rack 19 pouces 1U maximum depth : 250mm

**Environment**

Operating temperature: -20 ; + 60°C  
Storage temperature: -40 ; + 85°C  
Relative humidity : 0 to 85 % (non condensing)  
Conformal coated : 0 to 95%. Please consult us

**REFERENCES :**

**CONCENTRATION SYSTEM FOR ETHERNET NETWORKS OVER ONE OR TWO OPTICAL FIBRES:**

References	Applications	Housing and Power supply	Connectors
<b>HXDF 558 12S-2TG8FX-IV1</b>	Switch Ethernet 8 x 100Base-BX-D optical fibre ports 2 x Gigabit combo ports: RJ45 or SFP*	Rack 1U, 230VAC	SC /PC SFP module
<b>HDDF 358 12S-2TG8FX-IV1</b>	Switch Ethernet 8 x 100Base-FX optical fibre ports 2 x Gigabit combo ports: RJ45 or SFP*	Rack 1U, 230VAC	SC /PC SFP module

\* Gigabit Ethernet SFP and Fast Ethernet SFP not included, to be ordered additionally. Please see the table below:

**MAIN OPTICAL SFPs (-40 - +85 ° C)**

**FOR MORE INFORMATION, PLEASE CONSULT OUR SFP DATA SHEET**

References	Nbre and type of fibres	Transmission	Wavelength Tx/Rx	Distance maxi **	Connector
<b>SFPL-1GD31-20</b>	2 single-mode optical fibres	1000Base-LX	1310 nm	20 km	LC/PC
<b>SFPL-1GX31-20</b>	1 single-mode optical fibres	1000Base-BX-U	1310 nm /1550 nm	20 km	LC/PC
<b>SFPL-1GX55-20</b>		1000Base-BX10-D	1550/1310 nm		
<b>SFPL-FEX55-20</b>	1 single-mode optical fibres	100Base-BX-D	1550/1310 nm	20 km	LC/PC

\*\* For other distances, please consult us.

In line with the company policy of continuous improvement, product specifications are subject to change without prior notice