

Passive Optical Network

Type:	Fibrain Asymmetric Integrated Splitter	REV: 1.0
Date:	27/02/2023	MD
Modification:		
Reference:	FAIS -, see ref. system below	

FIBRAIN ASYMMETRIC INTEGRATED SPLITTERS *

Fibrain Asymmetric Integrated Splitters can be applied for asymmetric splitting of optical power transmitted in fiber optic networks. Fibrain FAIS splitters ensure very high stability of operation within the whole 1260-1650 nm band and have perfect thermal stability, guaranteeing operation in the temperature range -40/+85 °C. An important advantage from the point of view of link design and maintenance is high uniformity of attenuation of symmetric local channels. Asymmetric Integrated Splitters allow for an easy and cost-effective construction of FTTH networks in single-family housing conditions and offer unique advantages compared to the standard uniform (symmetric) PLC splitters.

Input port — Through port —	Symmetric local ports
PPLICATION FIELDS:	FEATURES AND ADVANTAGES:
 ✓ FTTH access networks ✓ HFC and cable networks ✓ Other optical telecommunication networks 	 ✓ Asymmetric split ratio ✓ Working band 1260 – 1650 nm ✓ Small housing dimensions

TECHNICAL SPECIFICATION:

*patent pending

Parameter	Unit		Value																			
Spectral operating range	nm	1260-1650																				
Insertion loss ¹ of through port	Through port	95%			90%				85%			80%			70%		60%			50%		
inscrion loss of though port	dB		0.65			0.90			1.20			1.50			2.10	2.80			3.60			
Max Insertion loss ¹ of local ports	Number of local ports	2CH	4CH	8CH	2CH	4CH	8CH	2CH	4CH	8CH	2CH	4CH	8CH	2CH	4CH	8CH	2CH	4CH	8CH	2CH	4CH	8CH
porto	dB	19.2	22.5	25.6	14.9	18.2	21.3	12.8	16.1	19.2	11.4	14.7	17.8	9.5	12.8	15.9	8.2	11.5	14.5	7.2	10.4	13.6
Max. attenuation	dB			2 local ports					4 local ports						8 local ports							
nonuniformity of local ports ²	uБ		0.3									0.7										
PMD	dB	< 0.3																				
Return loss	dB	> 35																				
Directivity	dB	> 50																				
Storage temperature	°C	-40/85 °C																				
Operating temperature	°C	-40/+85 °C																				
Fiber type			G.657A2																			

¹ Additional insertion loss with connectors: +0.4 dB

² Uniformity increased by 0.1 dB with connectors



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AVAILABLE HOUSING:

Housing	Dimensions	Fiber type				
Metal pipe	Pipe Ø5.5x50mm	250 µm				



ORDERING INFORMATION:

Series	Quality	Fiber type	Through port	Number of local ports	Input fiber	Input length	Output fiber	Output length	Housing	Input connector	Output connector
FAIS	G0	2 - G.657A2	95 – 95 %	2 – 2 CH	25 – 250 µm	0 – 0.5 m	25 – 250 µm	0 – 0.5 m	1 – pipe	SCA	SCA
			90 – 90 %	4 – 4 CH		1 – 1.0 m		1 – 1.0 m		SC	SC
			85 – 85 %	8 – 8 CH		2 – 2.0 m		2 – 2.0 m		LCA	LCA
			80 – 80 %							LC	LC
			70 – 70 %							E2A	E2A
			60 – 60 %							E20	E20
			50 – 50 %							XX	XX

Examples of references:

FAIS-G0-2-90-4-25-1-25-1-1-SCA-SCA – Fibrain Asymmetric Integrated Splitter, G.657A2, Through port 90%, 4x local ports, pipe housing Ø5.5x50 mm, 250 μm 1 m, SC/APC connectors.

Important notice

Buyer and/or user of this product has to make sure before using this product that it is suitable for the intended use. All questions of liability relating to this product are subject – in accordance with the prevailing – to the Term of Sale of the selling Fibrain subsidiary.