

IKUSI *by* **FAGOR**
FAGOR MULTIMEDIA SOLUTIONS

European technology with global reach

2024



FAGOR MULTIMEDIA SOLUTIONS

Together, further

Dear customer,

Fagor Electrónica is pleased to inform you of the recent acquisition of the company Triax Digital Solutions, formerly IKUSI Multimedia. With this operation, we reinforce our technological capabilities in order to offer a better global offer to our customers. We also consolidate our position as a reference supplier in the telecommunications infrastructure solutions sector.

The acquisition is motivated by the opportunity detected by Fagor Electrónica to advance in our strategic objectives of diversification and growth towards new value propositions and markets. And to do so, moreover, and to do so, moreover, in a way that is consistent with our commitment to maintaining employment and the roots of the activity.

As a result of the merger between Triax Digital Solutions and the signal processing unit of Fagor Electrónica, Fagor Multimedia Solutions is born. The new company will be based at our Head Quarters in Arrasate-Mondragón (Gipuzkoa) and will maintain two work centres in the Gipuzkoan towns of Arrasate-Mondragón, Arrasate-Mondragón (Gipuzkoa), Arrasate-Mondragón (Gipuzkoa) and Fagor-Mondragón (Gipuzkoa). The new company will be based at our Head Quarters in Arrasate-Mondragón (Gipuzkoa) and will maintain two work centres in the Gipuzkoan towns of Arrasate-Mondragón and Astigarraga.

The team will be made up of people from Fagor's multimedia business and the current staff of Triax Digital Solutions.

A combination of talents thanks to which we are going to be stronger and increase our capacity to create value for our customers. Because in Fagor Multimedia Solutions we integrate the deep experience of both companies in the telecommunications infrastructure sector. A sector which, as we are all aware, has undergone a profound transformation in recent years and which will be even greater in the near future.

With this commitment, Fagor Electrónica is also reinforcing its commitment to its professional customers in the telecommunications installation, electrical distribution and specialist sectors, as well as to engineers and designers in the telecommunications field.

Thank you for continuing to support us in this new phase.

Gorka Guerra
General Director
Fagor Multimedia Solutions



01. RECEPTION

TERRESTRIAL.....	2
. UHF ANTENNAS "FLASHD" SERIES	
. UHF ANTENNAS "COMPACT" SERIES	
. UHF ANTENNAS "NANO" SERIES	
. FM Radio ANTENNAS	
. DAB Digital Radio ANTENNAS	
 SATELLITE	3
. OFFSET DISHES ANTENNAS	
. LNBs OFFSET TYPE	
 ACCESSORIES.....	4
. SUPPORTS	
. MASTS AND TOWER	
 LTE FILTERS	4

02. AMPLIFICATION

MÁSTIL.....	5
. AMPLIFIERS "SBA" SERIES	
. POWER SUPPLIES "MICRO" SERIES	
. AMPLIFIER+POWER SUPPLY KITS "JSBA" SERIES	
 BROADBAND.....	6
. HIGH-POWER "NBS-800" SERIES	
. . SAT AMPLIFIERS/COMBINERS	
 PROGRAMMABLE HEADENDS	8
. ONE+ / ONE+ SAT	
 SINGLE CHANNEL/MULTICHANNEL	9
. AMPLIFIERS "SZB" SERIES	
. POWER SUPPLIES	
. ACCESSORIES	
 APARTMENT	10
. "ATP" SERIES	
 EXTENSION	11
. VHF/UHF/SAT/RP (Return Path) "SAE" SERIES	

03. TRANSMODULATION HEADENDS

IKUSI FLOW: SMART HEADEND.....	12
HTI: QUAD TRANSMODULATORS.....	13

CAST

Cast: DEVICE CONTENT ON TV	15
----------------------------------	----

05. MULTISWITCHES

MULTISWITCHES.....	16, 17
. MULTISWITCHES STAND ALONE	
. MULTISWITCHES CASCADABLES	
. AMPLIFIERS FOR MULTISWITCHES	
. SPLITTERS, TAPS	
. POWER SUPPLY	

06. DISTRIBUTION

TAP-OFFS AND SPLITTERS.....	18, 19, 20
. TAP-OFFS WITH F CONNECTION "UDM" SERIES	
. TAP-OFFS WITH FAST CONNECTION "UDB" SERIES	
. SPLITTERS WITH F CONNECTION "SCS" SERIES	
. ACCESS POINTS WITH F CONNECTION "PAU" SERIES	
. SPLITTERS+PAU WITH FAST CONNECTION "DAU" SERIES	
 COMBINADORES.....	20
. CATV TAP-OFFS "ACT AND DFC" SERIES	
. CATV SPLITTERS "DIFC AND ACS" SERIES	
 COAXIAL CABLES	22, 23
. COAXIAL CABLES EUROCLASS Dca	
. COAXIAL CABLES EUROCLASS Eca	
 CONECTORS.....	24
 OUTLETS	25

07. SC OPTICAL FIBER

OPTICAL FIBER.....	26
. TRANSMITTERS	
. RECEIVERS	
. SPLITTERS	
. ACCESSORIES	

08. FC OPTICAL SYSTEM

OPTICAL SYSTEM.....	27
. RECEIVERS	
. TRANSMITTERS	
. LNB	
. TRANSMITTER + LNB	
. SPLITTERS	

09. NETWORK ACCESSORIES

OPTICAL FIBER NETWORK	28
. ACCESS POINTS	
. OPTICAL FIBER CABLES EUROCLASS Dca	
. ACCESSORIES	
 UTP CABLE NETWORK.....	29
. UTP CABLES EUROCLASS Cca/Dca	
. ACCESSORIES	
 TELEPHONE NETWORK	30
. MULTIPLEXERS	
. PHONE CABLES EUROCLASS Dca/Eca	
. ACCESSORIES	
 COAXIAL DATA NETWORK.....	31
 TOOLS AND ACCESSORIES.....	31
 RACK CABINETS AND SUPPORTS.....	32
. RACK CABINETS	
. SUPPORTS AND PANELS	

10. MODULATORS

STANDALONE MODULATORS.....	33
----------------------------	----

TERRESTRIAL
UHF ANTENNAS

1816	HDTF-C48G	TV UHF antenna "FLASHD". Ch 21-48 (470-694 MHz). G=17 dB. Grey colour	1
1818	HDTF-C48V	TV UHF antenna "FLASHD". Ch 21-48 (470-694 MHz). G=17 dB. Green colour	1
1824	HDTC-694V	TV UHF antenna "COMPACT". Ch 21-48 (470-694 MHz) G=14 dB. Green colour	10
1825	HDTN-694V	TV UHF antenna "NANO". Ch 21-48 (470-694 MHz) G=12 dB. Green colour	10

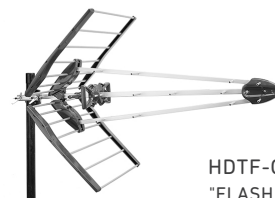
BAND II - FM ANTENNA

1726	IKF-1E	Omnidirectional FM antenna (G= -2 dB) Frequency= 87.5-108 MHz	1
------	--------	--	---

BAND III - DAB DIGITAL RADIO ANTENNA

1727	DAB-131	Digital radio antenna Frequency= 174-240 MHz. G= 2 dB	1
------	---------	--	---


HDTF-C48V
"FLASHD"

"Fully assembled and instant opening"

HDTF-C48G
"FLASHD"

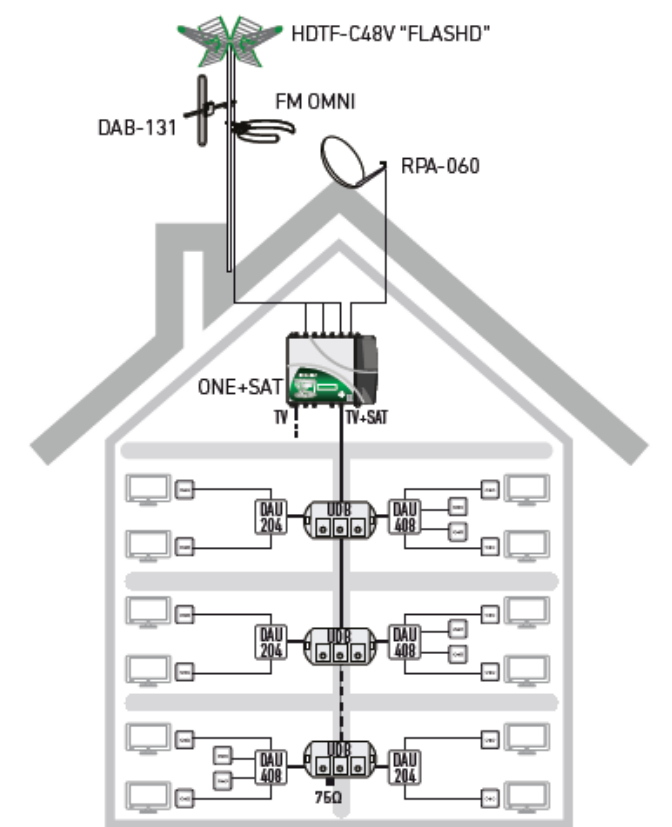
HDTC-694V
"COMPACT"

HDTN-694V
"NANO"


FM OMNI



DAB-131



SATELLITE

GALVANIZED STEEL OFFSET PARABOLIC DISH ANTENNAS

3065	RPA-060	Satellite Dish 60cm Ø, RAL7035 light grey	1
3067	RPA-080	Satellite Dish 80cm Ø, RAL7035 light grey	1
3069	RPA-100	Satellite Dish 100cm Ø, RAL7035 light grey	1
3060	RPA-120	Satellite Dish 120cm Ø, RAL7035 light grey	1



RPA-080



RPA-120

OFFSET TYPE LNBs

1113	UEU-121K	LNB Single 1 output/user	1
3083	UEU-221K	LNB Twin 2 outputs/users	1
1112	UEU-421K	LNB Quad 4 outputs/users	1
1114	UEU-124K	LNB Quattro 4 outputs/polarity VL/VH/HL/HH	1



UEU-121K



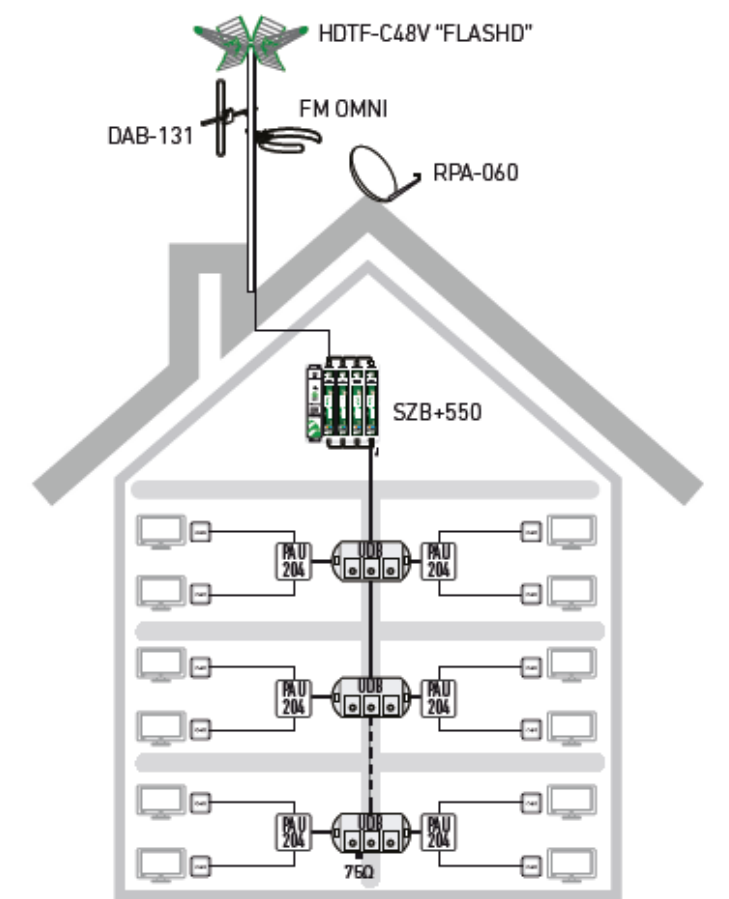
UEU-221K



UEU-421K



UEU-124K



ACCESORIES

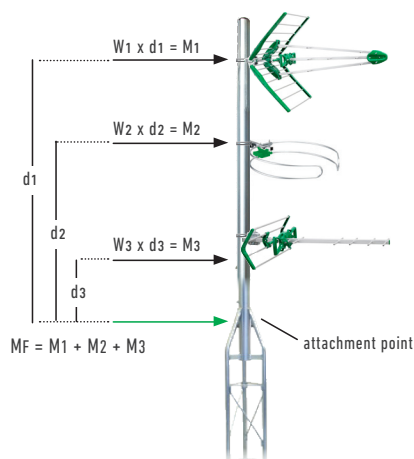
SUPPORTS AND BASES

1888	KMV-100	Wind set. Steelwire 25m, rigging screw, wirelock, for Ø 30-35 mm masts	1
1886	GME-200	Wall support bracket, 40 mm length for Ø 45 mm masts	10
1911	GMA-400	Wall-screwing clamp, 40 cm length for Ø 45 mm masts	10
1887	BMA-200	Wall bracket with 4-bolt plate and polyethylene cap	5
3071	SPA-240	Wall-fixing "U" type for satellite dishes antennas	1
1067	SCF-085	Ground-fixing "columna" type. Height: 900mm x Ø 50mm. Base dimensions: 200x200mm	1
1949	BAP-200	Hooked-support for SCF-085. Base dimensions: 200x200 mm	1
1913	BBT-100	Tiltable ridge-tale base for 35-40 mm Ø	5
1950	BTA-225	Screwed, triangular fixed 225 mm base	1
1876	BFT-100	Fixed triangular 225 mm hooked base	1

MASTS AND TOWERS

1941	MAS-300	Plug-in mast 3m length x 40mm Ø. Thickness 2 mm. Zinced steel	4
1880	MAS-250	Plug-in mast 2,5m length x 35mm Ø. Thickness 1,5 mm. Zinced steel	6
1942	TOR-250	Trestle-tower or upper section 2,5m. Adapted for ref.1941	1
1944	TOR-150	Trestle-tower or upper section 1,5m. Adapted for ref.1941	1

► MF bending moment calculation at the attachment point of a multi-antenna mast



W_{1,2,3} = * Wind loads from antennas
M_{1,2,3} = Bending moments due to each antenna
MF = Bending moment at the clamping point

* Wind loads from antennas

HDTF-C48	130 km/h: 105 N; 150 km/h: 150 N
FM OMNI	130 km/h: 28 N; 150 km/h: 38 N
HDTF-694	130 km/h: 18 N; 150 km/h: 23 N



KMV-100



GME-200



GMA-400



BMA-200



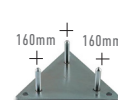
SPA-240



BAP-200



BBT-100



BTA-225



BFT-100



SCF-085



MAS-300



TOR-250

LTE FILTERS

LTE/5G REJECTION FILTERS

1436	FLTE-481	Internal filter, frequency rejection 470-694 MHz. DC bypass IEC connectors	1
314176	TLP 048	Indoor LTE rejection filter, frequency passband 5-694 MHz. Pass loss <3dB. Rejection at 730 MHz >50dB DC bypass. F connectors	1/10
85062	LFB-M 694	Outdoor LTE rejection filter, frequency passband 5-694 MHz. Passing loss <3dB. Rejection at 730 MHz >50dB. DC bypass. F connectors	1/10



FLTE-481



LFB-M 694



TLP 048

MAST AMPLIFIER
AMPLIFIERS
1 INPUT: UHF

1304	SBA-103-C48	1 UHF (470-694 MHz) input. G= 34 dB Power supply from 12 to 24VDC. DC bypass Output level= 113 dBμV (DIN 45004B IMD-60dB)	1/20
------	-------------	---	------



SBA-103-C48

SBA-101-C48

2 INPUTS: UHF - UHF

1296	SBA-101-C48	2 UHF-UHF (470-694 MHz) inputs. G= 36 dB Output level= 105 dBμV (DIN 45004B IMD-60dB) Power supply 24 VDC	1/20
------	-------------	---	------

2 INPUTS: UHF - SAT (Power Supply recommended: APB-112-M)

1308	SBA-190-C48	1 input UHF (G= 35 dB) 1 input SAT (G= -2 dB) Output level UHF= 105 dBμV (DIN 45004B IMD-60dB) Power supply 12 VDC. DC bypass input SAT	1/20
------	-------------	--	------



SBA-190-C48

POWER SUPPLIES

3436	APB-112M	Power supply switch mode +12VDC. 200mA. 1 output Frequency up to 2,4 GHz. Dimensions: 50x50 mm	10
3437	APB-224-M	Power supply switch mode +24VDC. 100mA. 2 outputs Frequency up to 1 GHz. Dimensions: 50x50 mm	10



APB-112-M



APB-224-M

AMPLIFIER+POWER SUPPLY KITS

1328	JSBA-103-C48	Amplifier SBA-103-C48 + Power supply APB-224-M	1/20
------	--------------	--	------



JSBA-103-C48

BROAD BAND
AMPLIFIER STATION (high power)
5 INPUTS: 2x UHF - SAT - BI/FM - BIII/DAB

3576	NBS-895-C48	UHF frequency: 470-694 MHz 2xUHF (G=45 dB) - SAT (G=40 dB) - BI/FM (G=42 dB) - BIII/DAB (G=42 dB) Output level TV= 122 dBμV - SAT= 120 dBμV	1/5	E
------	-------------	---	-----	---

4 INPUTS: 2x UHF - BI/FM - BIII/DAB

3564	NBS-804-C48	UHF frequency: 470-694 MHz 2xUHF (G= 45 dB) - BI/FM (G= 42 dB) - BIII/DAB (G= 42 dB) Output level TV= 122 dBμV	1/5	E
------	-------------	--	-----	---

1 INPUT: VHF/UHF

3573	NBS-801-C48	UHF frequency: 470-694 MHz VHF/UHF (G= 42 dB) Output level TV= 122 dBμV	1/5	E
------	-------------	---	-----	---



Serie NBS-800

AMPLIFIER STATION (mid power)
4 INPUTS: 2xUHF - SAT - VHF

3537	NBS-795-C48	UHF frequency: 470-694 MHz UHF (G= 35 dB) - SAT (G= 28-35) - VHF (G= 22 dB) Output level UHF= 115 dBμV - SAT= 120 dBμV - VHF= 115 dBμV	1/10	
------	-------------	--	------	--



NBS-795-C48

3 INPUTS: 2x UHF - VHF

3536	NBS-704-C48	UHF frequency: 470-694 MHz UHF (G= 35 dB) - VHF (G= 22 dB) Output level UHF= 115 dBμV - VHF= 115 dBμV	1/10	
------	-------------	---	------	--



NBS-704-C48

1 INPUT: UHF

3535	NBS-701-C48	UHF frequency: 470-694 MHz UHF (G= 35 dB) Output level UHF= 115 dBμV	1/10	
------	-------------	--	------	--



NBS-701-C48

BROAD BAND

SAT AMPLIFIERS/COMBINERS

3461 AFI-190

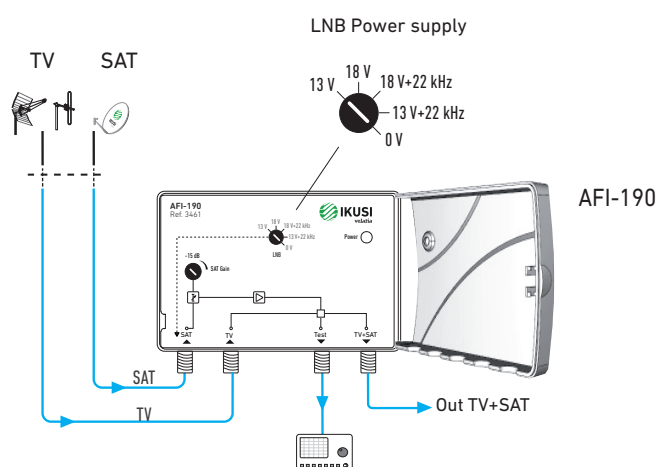
1 satellite 950-2450 MHz input
1 terrestrial coupling 5-862 MHz input
Voltage/tone injection for selection of LNB
Output level= 120 dBμV

1/20

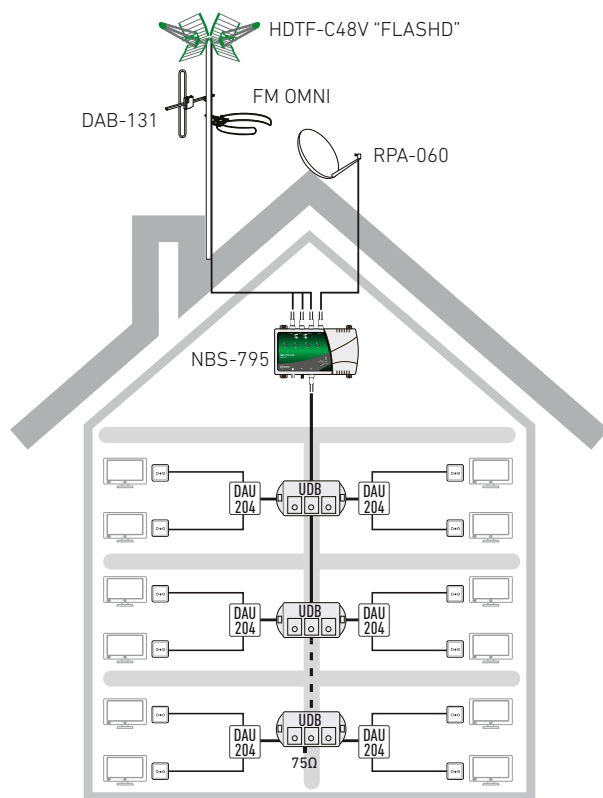


AFI-190

AFI-190 application example



Application example NBS-795-C48



PROGRAMMABLE HEADEND

PROGRAMMABLE HEADEND 32 DIGITAL FILTERS WITH CHANNEL CONVERSION

2864	ONE+ SAT	TERR and SAT programmable amplifier 7 inputs: 3x UHF, SAT, BI/FM, DAB/BIII, EXT (VHF/UHF) 2 onfigurable outputs: • 1 OUTPUT Configuration: OUT 1 [TERR (131 dBμV -IMD3 -36 dB) + SAT (122 dBμV)] • 2 OUTPUTS (ICT) Configuration: OUT 1 [TERR (128 dBμV) + SAT (122 dBμV)] OUT 2 [TERR (128 dBμV)]	1
2865	ONE+	TERR programmable Headend 5 inputs: 3x UHF, BI/FM, DAB/BIII 1 output TERR (131 dBμV -IMD3 -36 dB)	1

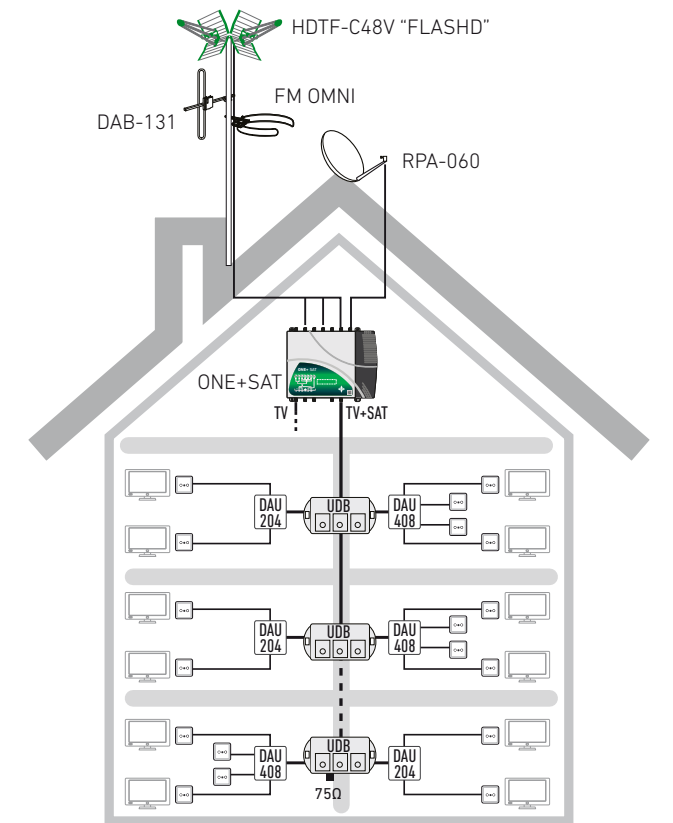


ONE+ SAT



ONE+

Application example ONE+ SAT



MONOCHANNEL/MULTCHANNEL HEADEND

SZB MODULE SERIES

AMPLIFIERS

UHF

2260	SZB+550	UHF Amplifier. Adjacent digital/analogue channel Output level= 121 dBμV. CAG. Configurable channels 3 bandwidth options: 6 MHz, 7 MHz, 8 MHz (specify in order)	1
------	---------	---	---

SAT

1346	SZB-190	SAT Amplifier / Combiner G= 33 dB (950 MHz) - 40 dB (2150 MHz) Output level= 120 dBμV	1
------	---------	---	---

VHF (BII/BIII)

2293	SZB-128	BII (FM) Amplifier. G= 30 dB Output level= 2x 113 dBμV	1
3160	SZB-168	Radio digital amplifier. G= 53 dB Output level= 2x 113 dBμV	1

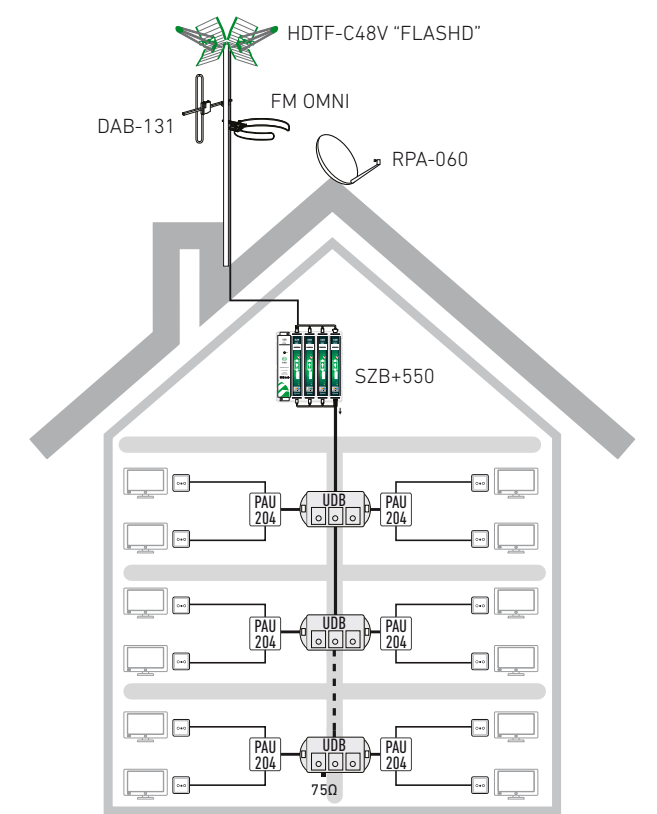
POWER SUPPLY

2250	SZB-214	Switching power supply 24 VDC; 4,5 A	1
------	---------	--------------------------------------	---

ACCESSORIES

2220	BAS-915	Base plate for 5 modules (power supply contacts)	1
2222	BAS-913	Base plate for 3 modules (power supply contacts)	1
2272	PZL-017	Bridge to connect new and existing headers. Length 200 mm	8
2247	PZB-453	Z plug bridge, F connectors. Length 45.3 mm	10

Application example SZB+550



SZB+550



SZB-214



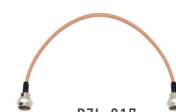
BAS-915



BAS-913



PZB-453



PZL-017

APARTMENT AMPLIFIER

AMPLIFIERS

1 UHF INPUT: 2 OUTPUTS

3584	ATP-200-C48	UHF frequency= 47-694 MHz Output level= 103 dBμV (IMD3 -60dB (DIN 45004B))	5
------	-------------	---	---

1 UHF INPUT: 4 OUTPUTS

3596	ATP-400-C48	UHF frequency= 47-694 MHz Output level= 103 dBμV (IMD3 -60dB (DIN 45004B))	1/10
------	-------------	---	------

1 UHF/SAT/RP INPUT: 2 OUTPUT

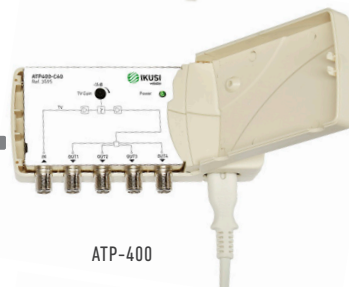
3593	ATP-290-C48	UHF frequency= 47-694 MHz SAT frequency = 950-2400 MHz; G= 22 dB Return path frequency= 5-30 MHz UHF Output level = 102 dBμV (IMD3 -60dB (DIN 45004B)) SAT= 108 dBμV (IMD3 -35dB (EN 50083-3))	1
------	-------------	--	---

1 INPUT TV/SAT: 2 OUTPUTS

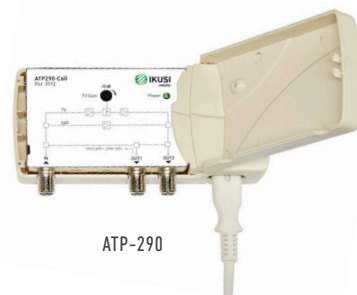
339407	IFB 407	1 input 47-230 / 470-694 MHz ; G= 30 dB 2 output. Output level= 105 dBμV (EN 50083-5) Power supply for preamplifiers (24 VDC/80 mA)	1/20
--------	---------	--	------



ATP-200



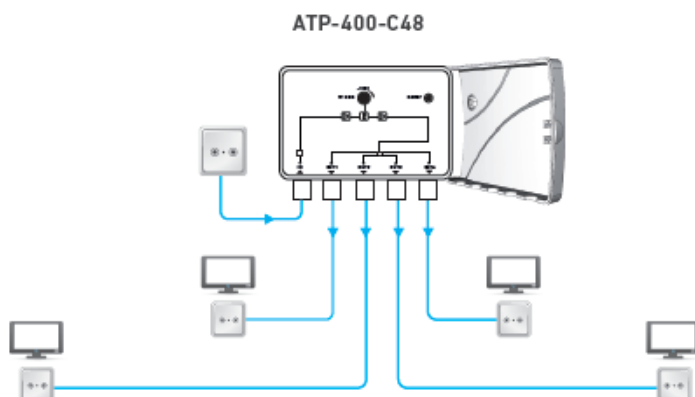
ATP-400



ATP-290



IFB-407



EXTENSION

VHF/UHF/SAT/REVERSE PATH 45-2150 MHz AMPLIFIERS

3500	SAE-912	TERR path (47-862 MHz) ; G= 35 dB ; Output level= 118 dBμV SAT path (950-2150 MHz) ; G= 40 dB ; Output level= 120 dBμV Passive return path (5-35 MHz) ; G= -2.5 dB	1/5
------	---------	--	-----

3503	SAE-916	TERR path (86-862 MHz) ; G= 35 dB ; Output level= 118 dBμV SAT path (950-2150 MHz) ; G= 40 dB ; Output level= 120 dBμV Active return path (5-65 MHz) ; G= 12 dB ; Output level= 110 dBμV	1/5
------	---------	--	-----

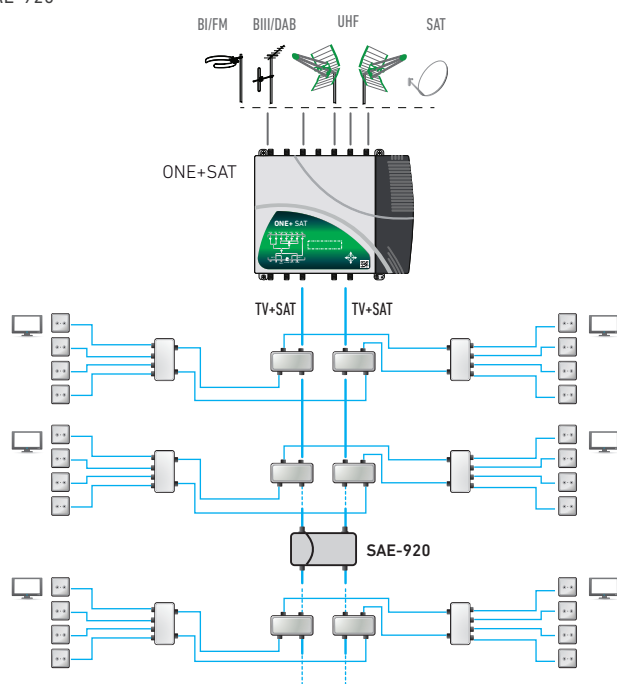
DOUBLE AMPLIFIER

3507	SAE-920	1 input TERR (47-862 MHz) + SAT 1 (950-2150 MHz) 1 input SAT 2 (950-2150 MHz) 2 output TERR+SAT 1 and TERR+SAT 2 TERR G=35 dB ; Output level=118 dBμV SAT G=40 dB ; Output level=120 dBμV	1/5
------	---------	---	-----



SAE

Application example SAE-920



FLOW INTELLIGENT HEADEND

MODULES

4319	FLOW-IN4	Quad universal input module	1
4311	FLOW-SEC	Double Security module 1	1
4321	FLOW-ENC+	Quad HDMI encoder module	1
4313	FLOW-OUT	Universal output module 1	1
4314	FLOW-HUB	Control module	1

COMMON ELEMENTS

4312	FLOW-BASE	12 slot chassis for rack and wall mounting	1
4308	FLOW-PSU	Power supply	1
4320	FLOW-RPSU	Redundant power supply 1	1
4316	FLOW-COVER	Ventilation cover for the platform	1

LICENSES

FOR 1 HEADEND

4317	FLOW-DEVICE-MGR (Device Manager)	Manager License	1
4335	FLOW-DRM-SAMSUNG-LYNK-HUB	Samsung LYNK DRM license	1
4337	FLOW-DRM-PHILIPS-VSECURE-HUB	DRM VSecure license	1
4338	FLOW-DRM-LG-PROIDIOM-HUB-MAN	DRM Pro:Idiom Manufacturer license	1
4340	FLOW-DRM-LG-PROIDIOM-HUB-SP	DRM Pro:Idiom Service Provider license	1

FOR 1 MODULE

4336	FLOW-DRM-LG-PROIDIOM-SEC	DRM Pro:Idiom SEC module license	1
4339	FLOW-DRM-LG-PROIDIOM-ENC	DRM Pro:Idiom ENC module license	1

WARRANTY EXTENSION

4330 . 4331 . 4332. Warranty extensions available for 1, 2 and 3 years

ACCESSORIES

4328	FLOW-STB-4K	IPTV/OTT SET-TOP BOX with 4K support	1
------	-------------	--------------------------------------	---



FLOW-IN4

FLOW-SEC



FLOW-ENC+

FLOW-OUT



FLOW-HUB

FLOW-PSU



FLOW-BASE



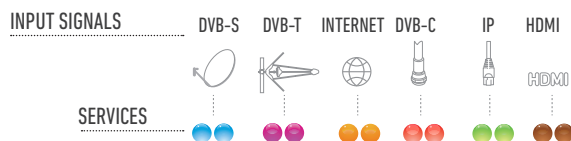
FLOW-RPSU



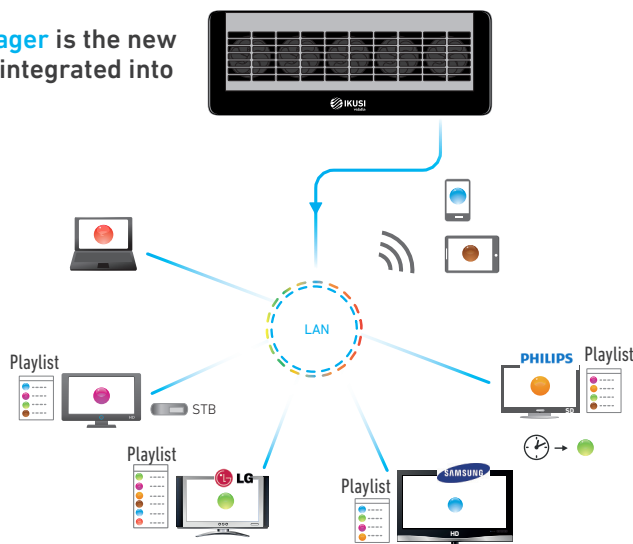
FLOW-COVER



FLOW-STB-4K



Device Manager is the new Application integrated into headend



CABECERA FLOW

HTI HEADEND

EURO

QUAD IPTV TRANSMODULATORS

3863	HTI-424	Transmodulator 4 universal DVB inputs and 4 IPTV inputs 4 outputs DVB-T/C ; 64 IPTV multicast outputs 2 Common Interface slots	1
------	---------	--	---

COMMON ELEMENTS

3865	PSU-150	Power supply for HTI headends Supports redundancy	1
3868	HTA-125	47-862 MHz Broadband amplifier; 125 dBuV	1
3866	BACK-500	Base plate (PSU+ 4 modules). Distributing the power supply and communicating the different modules	1

ACCESSORIES

3867	SR-HTI	Support to install the headend in a 19" rack (2 bases)	1
4404	COR-150	SCHUKO elbow connector	1
4284	USB-300	USB 3.0 adapter to Ethernet 10/100/1000	1
3870	UAH-001	Bridge for connection of two bases (BACK-500)	1
4285	ADA-HTI	Special bridges, to install ClassA modules in the HTI base (BACK-500)	1



HTI-424



HTA-125



PSU-150



SR-HTI



BACK-500



UAH-001



HTI HEADEND

HIGH DENSITY AND FLEXIBILITY
Up to 32 universal DVB inputs per base
Up to 32 RF outputs or 256 IPTV outputs per base

READY FOR IPTV INPUT
Up to 32 IPTV inputs per base

ADVANCED ROUTING MATRIX
From any input to any output.
Decoded in any CAM. No compromises

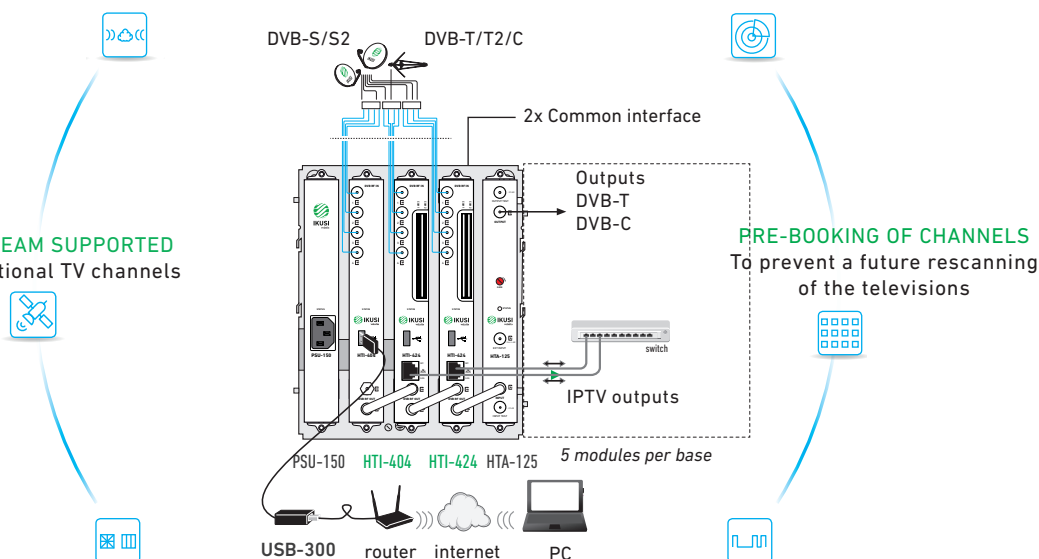
MULTISTREAM SUPPORTED
+ 200 additional TV channels

PRE-BOOKING OF CHANNELS
To prevent a future rescanning
of the televisions

SEPARATION OF AUDIOS
Generation of one TV channel for each audio

INDEPENDENT OUTPUT CHANNELS
Distributed over any part of the band

**INTERCONNECTED BASE-PLATE
REDUNDANT POWER SUPPLY**
Power supplied through the backplane, without bridges



CAST CONNECT / GPON

Ref.	Modelo	Descripción	Cant./Emb.
SOLUTION: CAST CONNECT (PLAY THE CONTENTS OF DEVICES ON THE TV)			
8477	CAST CONNECT 60 SRV	Cast Connect server 60 rooms	1
8441	CAST CONNECT 300 SRV	Cast Connect server 300 rooms	1
8478	CAST CONNECT 2000 SRV	Cast Connect server 2000 rooms	1
8490	SRV-CAR	Rack mounting bracket for Cast Connect 300 or 2000 servers.	1
8439	CASTLOCK PROTECTOR CHROMECAST	Cast lock. Protection system to prevent tampering of the Cast Connect device	1
8476	CAST-400 DONGLE+CASTLOCK	Chromecast V4 HD	1
10033	GCD CAST V4 UHD	Chromecast V4 4K UHD	1



Servidor Cast Connect



Escuadras soporte



Chromecast



Lock system

LICENCES

8456	Cast Connect protect 1 year	1
------	-----------------------------	---

GPON SOLUTION

8302/208302OLT-008	OLT 8 ports PON; 4GB ethernet; 4SFP; 2SFP +	1
	Others models on request	
8319	ONT-524	4xRG45 GB; 2POT; Wiffi 2,4-5GHz; 1xUSB
	Others models on request	1



MULTISWITCHES

Ref.	Modelo	Descripción	Cant./Emb.
------	--------	-------------	------------

MULTISWITCHES STAND ALONE

5 INPUTS (4 SAT + 1 TERR)

86460	FMF-508	Multiswitch FI stand alone P.S. included. 5 x 8 outputs	1
86461	FMF-512	Multiswitch FI stand alone P.S. included. 5 x 12 outputs	1
86462	FMF-516	Multiswitch FI stand alone P.S. included. 5 x 16 outputs	1
86463	FMF-524	Multiswitch FI stand alone P.S. included. 5 x 24 outputs	1
86464	FMF-532	Multiswitch FI stand alone P.S. included. 5 x 32 outputs	1



FMF-508

9 INPUTS (8 SAT + 1 TERR)

86465	FMF-908	Multiswitch FI stand alone P.S. included. 9 x 8 outputs	1
86466	FMF-912	Multiswitch FI stand alone P.S. included. 9 x 12 outputs	1
86467	FMF-916	Multiswitch FI stand alone P.S. included. 9 x 16 outputs	1
86468	FMF-924 S	Multiswitch FI stand alone P.S. included. 9 x 24 outputs	1
86469	FMF-932	Multiswitch FI stand alone P.S. included. 9 x 32 outputs	1



FMF-916

13 INPUTS (12 SAT + 1 TERR)

86625	FMF-1308	Multiswitch FI stand alone P.S. included. 13 x 8 outputs	1
86626	FMF-1312	Multiswitch FI stand alone P.S. included. 13 x 12 outputs	1
86627	FMF-1316	Multiswitch FI stand alone P.S. included. 13 x 16 outputs	1
86628	FMF-1324	Multiswitch FI stand alone P.S. included. 13 x 24 outputs	1
86629	FMF-1332	Multiswitch FI stand alone P.S. included. 13 x 32 outputs	1



FMF-1324

17 INPUTS (16 SAT + 1 TERR)

86470	FMF-1708	Multiswitch FI stand alone P.S. included. 17 x 8 outputs	1
86471	FMF-1712	Multiswitch FI stand alone P.S. included. 17 x 12 outputs	1
86472	FMF-1716	Multiswitch FI stand alone P.S. included. 17 x 16 outputs	1
86473	FMF-1724	Multiswitch FI stand alone P.S. included. 17 x 24 outputs	1
86474	FMF-1732	Multiswitch FI stand alone P.S. included. 17 x 32 outputs	1



FMF-1716

MULTISWITCHES CASCADABLE

5 INPUTS (4 SAT + 1 TERR)

86432	FMC-508	Multiswitch cascable 5 x 8 outputs	1
86433	FMC-512	Multiswitch cascable 5 x 12 outputs	1
86434	FMC-516	Multiswitch cascable 5 x 16 outputs	1
86445	FMC-524	Multiswitch cascable 5 x 24 outputs	1
86446	FMC-532	Multiswitch cascable 5 x 32 outputs	1



FMC-508

9 INPUTS (8 SAT + 1 TERR)

86436	FMC-908	Multiswitch cascable 9 x 8 outputs	1
86437	FMC-912	Multiswitch cascable 9x 12 outputs	1
86438	FMC-916	Multiswitch cascable 9x 16 outputs	1
86447	FMC-924	Multiswitch cascable 9x 24 outputs	1
86448	FMC-932	Multiswitch cascable 9x 32 outputs	1



FMC-916

13 INPUTS (12 SAT + 1 TERR)

86620	FMC-1308	Multiswitch cascable. 13x 8 salidas	1
86621	FMC-1312	Multiswitch cascable. 13x 12 salidas	1
86622	FMC-1316	Multiswitch cascable. 13x 16 salidas	1
86623	FMC-1324	Multiswitch cascable. 13x 24 salidas	1
86624	FMC-1332	Multiswitch cascable. 13x 32 salidas	1



FMC-1324

MULTISWITCHES

Ref.	Modelo	Descripción	Cant./Emb.
17 INPUTS (16 SAT + 1 TERR)			
86439	FMC-1708	Multiswitch cascadable. 17x 8 outputs	1
86440	FMC-1712	Multiswitch cascadable. 17x 12 outputs	1
86441	FMC-1716	Multiswitch cascadable. 17x 16 outputs	1
86449	FMC-1724	Multiswitch cascadable. 17x 24 outputs	1
86450	FMC-1732	Multiswitch cascadable. 17x 32 outputs	1



FMC-1716

AMPLIFIERS FOR MULTISWITCHES

86442	FAC-005	Head-end amplifier 5 IN & OUT with Power Supply SPS-1825 (22dB gain; Tilt 4dB)	1
86443	FAC-009	Head-end amplifier 9 IN & OUT with Power Supply SPS-1825 (22dB gain; Tilt 4dB)	1
86630	FAC-013	Head-end amplifier & OUT with Power Supply SPS-1825 (22dB gain; Tilt 4dB)	1
86444	FAC-017	Head-end amplifier 17 IN & OUT with Power Supply SPS-1825 (22dB gain; Tilt 4dB)	1



FAC-017

SPLITTERS FOR MULTISWITCHES

86451	FSP-005	Splitter 5 IN / 10 OUT	1
86454	FSP-009	Splitter 9 IN / 18 OUT	1



FSP-009

TAPS FOR MULTISWITCHES

86452	FTP 505	Tap 5 IN / 5 OUT	1
86453	FTP-510	Tap 5 IN / 10 OUT	1
86455	FTP-909	Tap 9 IN / 9 OUT	1
86456	FTP-918	Tap 9 IN / 18 OUT	1
86458	FTP-1717	Tap 17 IN / 17 OUT	1
86459	FTP-1734	Tap 17 IN / 34 OUT	1



FTP-918

POWER SUPPLY

86430	SPS-1825	Power Supply +18Vdc / 2,5A	1
-------	----------	----------------------------	---

ACCESSORIES

86559	UCM-100	Output configuration unit	1
-------	---------	---------------------------	---



UCM-100

TAPS & SPLITTERS

5-2400 MHz TAP-OFFS WITH F CONNECTION "UDM" SERIES

1 SALIDA

2052	UDM-110	Tap-off 1 output. Tap loss 10 dB	1/10
2053	UDM-115	Tap-off 1 output. Tap loss 15 dB	1/10
2054	UDM-120	Tap-off 1 output. Tap loss 20 dB	1/10
2055	UDM-125	Tap-off 1 output. Tap loss 25 dB	1/10

2 SALIDAS

2056	UDM-210	Tap-off 2 output. Tap loss 10 dB	1/10
2057	UDM-215	Tap-off 2 output. Tap loss 15 dB	1/10
2058	UDM-220	Tap-off 2 output. Tap loss 20 dB	1/10
2059	UDM-225	Tap-off 2 output. Tap loss 25 dB	1/10

4 SALIDAS

2060	UDM-410	Tap-off 4 output. Tap loss 10 dB	1/10
2061	UDM-415	Tap-off 4 output. Tap loss 15 dB	1/10
2062	UDM-420	Tap-off 4 output. Tap loss 20 dB	1/10
2063	UDM-425	Tap-off 4 output. Tap loss 25 dB	1/10

6 SALIDAS

2064	UDM-615	Tap-off 6 output. Tap loss 15 dB	1/10
2065	UDM-620	Tap-off 6 output. Tap loss 20 dB	1/10
2066	UDM-625	Tap-off 6 output. Tap loss 25 dB	1/10

8 SALIDAS

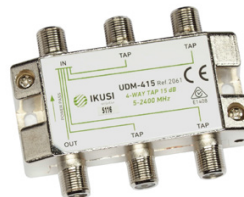
2067	UDM-815	Tap-off 8 output. Tap loss 15 dB	1/10
2068	UDM-820	Tap-off 8 output. Tap loss 20 dB	1/10
2069	UDM-825	Tap-off 8 output. Tap loss 25 dB	1/10



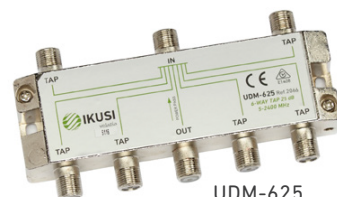
UDM-115



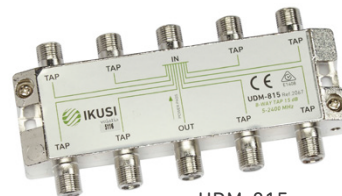
UDM-225



UDM-415



UDM-625



UDM-815

TAPS & SPLITTERS

5-2400 MHz TAP-OFFS WITH FAST CONNECTION "UDB" SERIES

1 OUTPUT

2110	UDB-110	Tap-off 1 output. Tap loss 10 dB	10
2111	UDB-115	Tap-off 1 output. Tap loss 15 dB	10
2112	UDB-120	Tap-off 1 output. Tap loss 20 dB	10

2 OUTPUTS

2113	UDB-210	Tap-off 2 output. Tap loss 10 dB	10
2114	UDB-215	Tap-off 2 output. Tap loss 15 dB	10
2115	UDB-220	Tap-off 2 output. Tap loss 20 dB	10
2116	UDB-225	Tap-off 2 output. Tap loss 25 dB	10

4 OUTPUTS

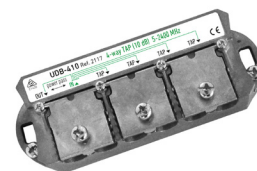
2117	UDB-410	Tap-off 4 output. Tap loss 10 dB	10
2118	UDB-415	Tap-off 4 output. Tap loss 15 dB	10
2119	UDB-420	Tap-off 4 output. Tap loss 20 dB	10
2120	UDB-425	Tap-off 4 output. Tap loss 25 dB	10

6 OUTPUTS

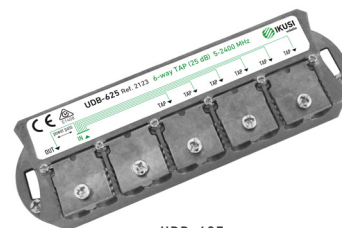
2121	UDB-615	Tap-off 6 output. Tap loss 15 dB	10
2122	UDB-620	Tap-off 6 output. Tap loss 20 dB	10
2123	UDB-625	Tap-off 6 output. Tap loss 25 dB	10

8 OUTPUTS

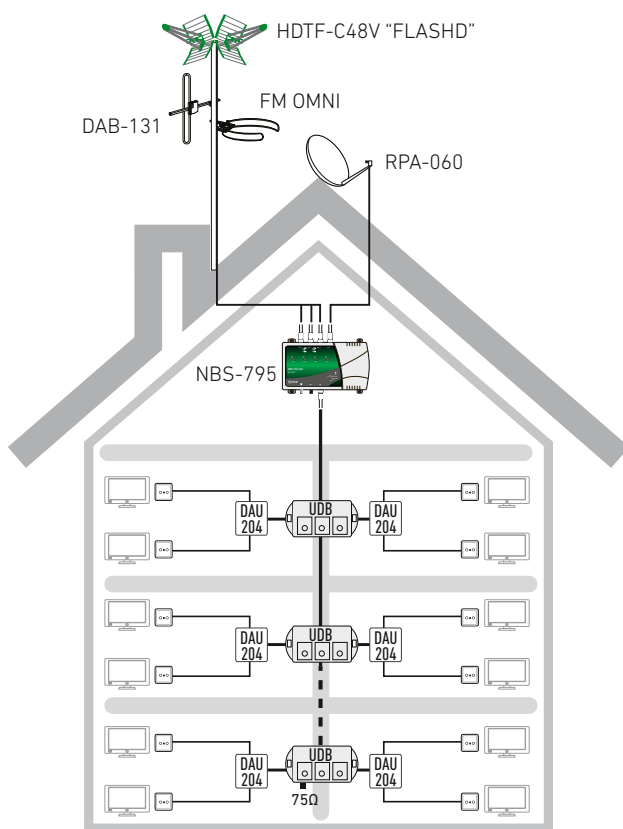
2124	UDB-815	Tap-off 8 output. Tap loss 16 dB	10
2125	UDB-820	Tap-off 8 output. Tap loss 20 dB	10



UDB-410



UDB-625



TAPS & SPLITTERS
5-2400 MHz SPLITTERS WITH F CONNECTION "SCS" SERIES

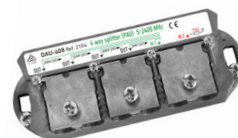
2092	SCS 2	Splitter 2 outputs. Attenuation 4 to 6 dB	1/10
2093	SCS 3	Splitter 3 outputs. Attenuation 6 to 8 dB	1/10
2094	SCS 4	Splitter 4 outputs. Attenuation 7 to 9 dB	1/10
2096	SCS 6	Splitter 6 outputs. Attenuation 10 to 12 dB	1/10
2098	SCS 8	Splitter 8 outputs. Attenuation 11 to 14 dB	1/10


5-2400 MHz USER ACCESS POINTS WITH F CONNECTION "PAU" SERIES

3331	PAU-204	User access point 2 output. Attenuation 6 dB	10
3354	PAU-203	User access point 3 output. Attenuation 10 dB	10
3369	PAU-904	User access point 4 output. Attenuation 10.5 dB	10
3370	PAU-905	User access point 5 output. Attenuation 16 dB	10
3379	PAU-906	User access point 6 output. Attenuation 16.5 dB	10
3380	PAU-908	User access point 8 output. Attenuation 17 dB	10


5-2400 MHz SPLITTERS+PAU WITH FAST CONNECTION "DAU" SERIES

2102	DAU-204	Splitter+PAU 2 outputs. Attenuation 4.5 dB	10
2103	DAU-307	Splitter+PAU 3 outputs. Attenuation 8 dB	10
2104	DAU-408	Splitter+PAU 4 outputs. Attenuation 9.5 dB	10
2105	DAU-510	Splitter+PAU 5 outputs. Attenuation 11.5 dB	10
2106	DAU-612	Splitter+PAU 6 outputs. Attenuation 13 dB	10
2107	DAU-813	Splitter+PAU 8 outputs. Attenuation 14.5 dB	10


TV-IF COMBINER

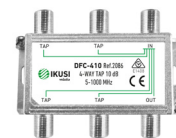
3372	DMS-300	3 inputs combiner (TV; SAT 1; SAT 2) 2 outputs (TV+SAT 1; TV+SAT 2). DC bypass	1
511102	CTS 2400	Mixer 2 inputs (SAT + Terr), 1 output (SAT+Terr) DC bypass In/Out	1/10



TAPS & SPLITTERS

TAP OFF FOR CATV NETWORKS 5-1000 MHz

2086	DFC-410	Tap off 4 outputs. Attenuation 10 dB	10	▶
2087	DFC-415	Tap off 4 outputs. Attenuation 15 dB	10	▶
2088	DFC-420	Tap off 4 outputs. Attenuation 20 dB	10	▶
2089	DFC-425	Tap off 4 outputs. Attenuation 25 dB	10	▶



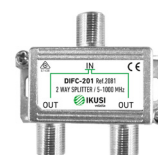
DFC-410



DFC-425

5-1000 MHz SPLITTERS FOR CATV NETWORKS

2081	DIFC-201	Splitter 2 outputs. Attenuation 4 dB	10	▶
------	----------	--------------------------------------	----	---



DIFC-201

COAXIAL CABLE
**CPR
Dca**
COAXIAL CABLE EUROCLASS CPR Dca
INNER CONDUCTOR Cu | BRAID Cu 128 wires | Class A | LSZH

2780	CUC-640	Attenuation 15 dB (694 MHz) ; 28 dB (2150 MHz), Ø6.8 mm, White, CPR Dca. RG6. Indoor	4x100 m
------	---------	---	---------

INNER CONDUCTOR Cu | BRAID Cu 96 wires | Class A | LSZH

2791	CUC-540	Attenuation 16 dB (694 MHz) 29.9 dB (2150 MHz) Ø6.8 mm, White, CPR Dca. RG6. Indoor	4x100 m
2790	CUC-544	Attenuation 16 dB (694 MHz) 29.9 dB (2150 MHz), Ø6.8 mm, Black, CPR Dca. RG6. Indoor/Outdoor	4x100 m

INNER CONDUCTOR Cu | BRAID CCA 128 wires | Class A | LSZH

2783	CUA-540	Attenuation 16 dB (694 MHz) 29.6 dB (2150 MHz) Ø6.8 mm, Blanco, CPR Dca. RG6. Indoor	4x100 m
2785	CUA-544	Attenuation 16 dB (694 MHz) 29.6 dB (2150 MHz) Ø6.8 mm, Black, CPR Dca. RG6. Indoor/Outdoor	4x100 m

INNER CONDUCTOR Cu | BRAID Al 96 wires | Class A | LSZH

2781	CUL-640	Attenuation 16,5 dB (694 MHz) 31 dB (2150 MHz) Ø6,8 mm, White, CPR Dca. RG6. Indoor	4x100 m
------	---------	--	---------

INNER CONDUCTOR CCS | BRAID Al 112 wires | Class A | LSZH

2786	CSL-611	Attenuation 1.3 dB (5 MHz) 14.5 dB (1000 MHz) Ø10.1 mm, Black, CPR Dca. RG11. Indoor/Outdoor	1x200 m
2787	CSL-640	Attenuation 1,9 dB (5 MHz) 19 dB (1000 MHz) Ø6.9 mm, White, CPR Dca. RG6. Indoor/Outdoor	4x100 m
2788	CSL-644	Attenuation 1.9 dB (5 MHz) 19 dB (1000 MHz) Ø6,9 mm, Black, CPR Dca. RG6. Indoor/Outdoor	4x100 m
2789	CSL-659	Attenuation 2.8 dB (5 MHz) 25.4 dB (1000 MHz) Ø6 mm, White, CPR Dca. RG59. Indoor/Outdoor	4x100 m



CUC-640



CUC-540



CUC-544



CUA-540



CUA-544



CUL-640



CSL-611



CSL-640



CSL-644



CSL-659

COAXIAL CABLE

COAXIAL CABLE EUROCLASS CPR Eca

INNER CONDUCTOR Cu | BRAID Cu 96 wires | Class A

2563	CUC-340	Attenuation 16 dB (694 MHz) 29.9 dB (2150 MHz), Ø6.8 mm, PVC White. RG6. Indoor	4x100 m
------	---------	--	---------

INNER CONDUCTOR Cu | BRAID CCA 128 wires | Class A

2557	CUA-340	Attenuation 16 dB (694 MHz) 29.6 dB (2150 MHz), Ø6.8 mm, PVC White. RG6. Indoor	4x100 m
------	---------	--	---------

INNER CONDUCTOR Cu | BRAID Al 96 wires | Class A

2495	CUL-440	Attenuation 16.6 dB (694 MHz) 31 dB (2150 MHz), Ø6.8 mm, PVC White. RG6. Indoor	4x100 m
------	---------	--	---------

2494	CUL-443	Attenuation 16,6 dB (694 MHz) 31 dB (2150 MHz), Ø6.8 mm, PVC White. RG6. Indoor	1x300 m
------	---------	--	---------

INNER CONDUCTOR CCS | BRAID Al 80 wires | Class B

2493	17VATCAPH1	Attenuation 19 dB (862 MHz) 30 dB (2150 MHz), Ø6.8 mm, PVC White. RG6	4x100 m
------	------------	--	---------

2550	CSL-443	Attenuation 19 dB (862 MHz) 30 dB (2150 MHz), Ø6.8 mm, PVC White. RG6	1x300 m
------	---------	--	---------



CUC-340



CUA-340



CUL-440



CUL-443



17VATCAPH1



CSL-443

CONNECTORS

Ref.	Modelo	Descripción	Cant./Emb.
------	--------	-------------	------------

CONNECTING ELEMENTS FOR COAXIAL CABLES

F SCREW-ON CONNECTORS

2377	CFR-680	F male connector screw-on for RG6 cables	100
------	---------	--	-----



COMPRESSION CONNECTORS

3133	CCF-111	F male compression connector for RG11 cables	25
3131	CFC-600	F male compression connector for RG6 cables	50
2380	CFC-590	F male compression connector for RG59 cables	50



F CRIMP CONNECTORS

2513	CTF-125	F male crimp connector for RG11 cables	25
2368	CTF-190	F male crimp connector for RG6 cables	50



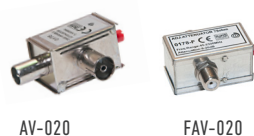
IEC ELBOW CONNECTORS

1502	CAD	IEC male elbow connector for RG6 and RG59 cables	50
1503	CHD-950	IEC female elbow connector for RG6 and RG59 cables	50



ATTENUATORS

3105	FAV-020	F type attenuator. 75Ω	1
1674	AV-020	Variable attenuator, constant impedance. 9,5 mm Ø Without DC bypass	10
3242	FAV-920	2150 MHz frequency attenuator	1



ACCESSORIES

1107	FIS-950	IF plug-in amplifier	1
2379	BCF-060	60 V AC/DC block F type male-female connector	10
2221	CTF-075	Charge 75 Ω. For loading an F port. Nickered brass	10
2071	CTB-075	75Ω termination for flange connector	10
1408	V-2T	2 way splitters / 2 input combiners	10
3241	IFC-215	Shielded power inserter	1
3211	FMM-100	Quick connector F male-male	50
1847	UCF-170	Hex crimp tool for CTF-125 and CTF-190 connectors	1
3132	UCR-600	Compression tool for CCF-111 and CFC-600 connectors	1



OUTLETS

SHIELDED OUTLET (without coverplate)

2574	ARTU008	Bridged end outlet for star installation, 1.5 dB (862 MHz)	10
2576	ARTU081	Resistive end outlet for star installation, 3 dB (1000 MHz)	10

TV/SAT FILTERED OUTLET, SHIELDED (without coverplate)

2571	ARTU068	TV-SAT end outlet for star installation, 1 dB (694 MHz), 1.5 dB (2400 MHz), DC bypass. Without fixing hooks	10
2570	ARTU088	TV-SAT end outlet for star installation, 1 dB (862 MHz), 1.5 dB (2400 MHz), DC bypass. With fixing hooks	10

TV/SAT INDUCTIVE OUTLET, SHIELDED (without coverplate)

2578	ARTU980	TV/SAT-TV/SAT end outlet, 4.5 dB (862 MHz), 6 dB (2400 MHz) With DC bypass. Cascade installation. With fixing hooks	10
2579	ARTU981	TV/SAT-TV/SAT intermediate outlet, 9 dB (862 MHz), 10 dB (2400 MHz) With DC bypass. Cascade installation. With fixing hooks	10
2580	ARTU982	TV/SAT-TV/SAT intermediate outlet, 13 dB (862 MHz), 14 dB (2400 MHz) With DC bypass. Cascade installation. With fixing hooks	10
2575	ARTU983	TV/SAT-TV/SAT intermediate outlet, 20 dB (862 MHz), 24 dB (2400 MHz) With DC bypass. Cascade installation. With fixing hooks	10

CATV FILTERED OUTLET, SHIELDED (without coverplate)

2573	ARTU111	TV-RD end outlet, for star installation, 3 dB (108 MHz) 0.5 dB (1000 MHz). With DC bypass	10
------	---------	---	----

TV/RD/SAT OUTLET (with coverplate and frame)

5360	PSE-300	TV-RD-SAT end outlet (5-68/125-862 MHz; 88-108 MHz; 950-2400 MHz) Input attenuation: TV (≤ 2 dB); RD (≤ 2 dB); SAT (≤ 3 dB)	10
------	---------	---	----

ACCESSORIES

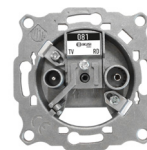
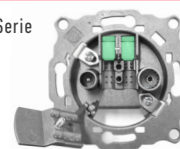
COVERPLATES

2488	PBT-980	TV+SAT - TV+SAT. For outlets ref. 2578; 2579; 2580; 2575	10
2489	PBT-990	TV+RD - SAT. For outlets ref. 2570; 2571	10
2490	PBT-480	TV - RD. For outlets ref. 2574; 2576; 2573	10

FRAME

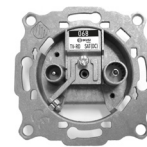
1460	ABT-210	Surface mounting frame adaptable for coverplate PBT	50
------	---------	---	----

ARTU Serie



ARTU0081

ARTU081



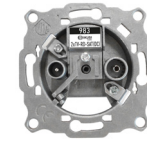
ARTU068

ARTU088



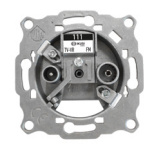
ARTU980

ARTU981



ARTU982

ARTU983



ARTU111



PSE-300



PBT-xxx



ABT-210

OPTICAL FIBER SC

TRANSMITTER

HEADEND

4915	FTD-420	Optical transmitter (TERR: 45-862 MHz); (SAT: 950-2150 MHz) Optical wavelength: 1310 nm (SC/APC), Power: 4 mW	1
------	---------	--	---



FTD-420

STAND-ALONE

4870	FTD-1110	Optical transmitter (45-862 MHz). Optical wavelength: 1550 nm (SC/APC). Power: 10 mW	1
------	----------	---	---



FTD-1110

4871	FTD-1290	Optical transmitter (45-2600 MHz). Optical wavelength: 1550 nm (SC/APC). Power: 10 mW	1
------	----------	--	---



FTD-1290

ACTIVE RECEIVERS

4914	FRD-400	Optical receiver (TERR: 45-862 MHz); (SAT: 950-2150 MHz) Optical wavelength: 1290-1600 nm (SC/APC) Optical power: TERR: 119 dBuV / SAT: 120 dBuV (IMD3 -60 DIN45004B)	1
------	---------	---	---



FRD-400

4872	FRD-110	Active optical receiver (45-862 MHz). Optical wavelength: 1300-1560 nm (SC/APC)	1
------	---------	--	---



FRD-110

4873	FRD-190	Active optical receiver (45-2600 MHz). Optical wavelength: 1300-1560 nm (SC/APC)	1
------	---------	---	---



FRD-190

PASSIVE RECEIVERS

4874	FRD-010	Passive optical receiver (47-1000 MHz). Optical wavelength: 1550 nm (SC/APC)	1
------	---------	---	---



4875	FRD-090	Passive optical receiver (47-2150 MHz). Optical wavelength: 1550 nm (SC/APC)	1
------	---------	---	---



OPTICAL SPLITTERS

HEADEND

4904	FSP-302	Optical splitter 2 way (SC/APC)	1
4905	FSP-303	Optical splitter 3 way (SC/APC)	1
4916	FSP-304	Optical splitter 4 way (SC/APC)	1
4918	FSP-306	Optical splitter 6 way (SC/APC)	1



FSP-302

FSP-303

STAND-ALONE

4896	FSP-202	Optical splitter 2 way (SC/APC)	1
4898	FSP-204	Optical splitter 4 way (SC/APC)	1
4897	FSP-208	Optical splitter 8 way (SC/APC)	1
4899	FSP-216	Optical splitter 16 way (SC/APC)	1



FSP-302/303/304/306

ACCESSORIES

ATTENUATORS

4892	FAO-004	Optical attenuator 4 dB (SC/APC)	1
4893	FAO-006	Optical attenuator 6 dB (SC/APC)	1



FSP-216



FSP-202

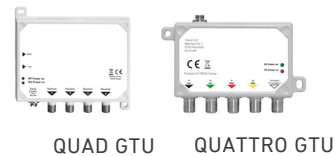


FAO-006

OPTICAL FIBER FC

RECEIVERS

4952	QUAD GTU	Optical receiver 1 FC/PC optical input and 4 FI+Terr outputs QUAD type, for four independent users Output level SAT: 70 dBμV - Terr: 68 dBμV	1
4953	QUATTRO GTU	Optical Receiver 1 FC/PC optical input plus 1 RF output and four fixed IF outlets, type QUATTRO Wavelength 1100 to 1650 nm Output level SAT: 70 dBμV - Terr: 68 dBμV	1
4951	PSU QUATTRO	Power supply for TVQ 06, TVC 06 100...240 VAC / 20 VDC	1



QUAD GTU QUATTRO GTU



PSU QUATTRO

TRANSMITTER + LNB

4970	OTX 1310 Kit	The OTX 1310 kit consists of the wideband LNB TWB 40 and the OTX 1310 SAT fiber optic transmitter including the plug-in power supply. This transmitter unit enables the distribution of the vertical and horizontal SAT bands in combination with terrestrial broadcast channels over a fiber optic (FO) network to a large number of buildings and households.	1
------	--------------	--	---



OTX 1310 Kit

SPLITTERS

4890	FSP-104	Optical distributor 1 input, 4 outputs metallic, FC/PC connectors, distribution attenuation 7.0 dB	1
4891	FSP-108	Optical distributor 1 input, 8 outputs metallic, FC/PC connectors, distribution attenuation 10.1 dB	1

ATTENUATORS

4947	FAO 010	10 dB FC/PC optical attenuator	1
4948	FAO 015	15 dB FC/PC optical attenuator	1



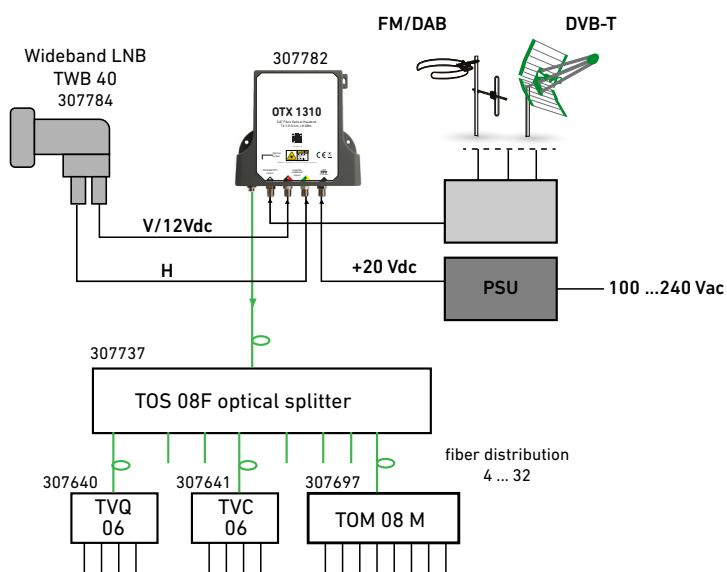
FSP-104

FSP-108



TFA 010

TFA 015



OPTICAL FIBER NETWORK
ACCESS POINTS
FIBER OPTIC BOXES

8221	PAUF-002	Fibre optic box with fusion tray (material ABS UL94-V0) + 2x adapters SC/APC + 2 pigtails de 1.5 m	1
------	----------	---	---

PAUs FIBER OPTIC CONNECTORIZED AT ONE END

8002	PAUF-110D	PAU optic + pigtail 10 m SC/APC. CPR Dca	1
8003	PAUF-115D	PAU optic + pigtail 15 m SC/APC. CPR Dca	1
8004	PAUF-120D	PAU optic + pigtail 20 m SC/APC. CPR Dca	1
8005	PAUF-125D	PAU optic + pigtail 25 m SC/APC. CPR Dca	1
8006	PAUF-130D	PAU optic + pigtail 30 m SC/APC. CPR Dca	1
8007	PAUF-140D	PAU optic + pigtail 40 m SC/APC. CPR Dca	1
8008	PAUF-155D	PAU optic + pigtail 55 m SC/APC. CPR Dca	1
8009	PAUF-170D	PAU optic 70 m SC/APC. CPR Dca	1

PAUs FIBER OPTIC CONNECTORIZED AT BOTH ENDS

8011	PAUF-210D	PAU optic + Fiber Patch cable 10 m SC/APC. CPR Dca	1
8012	PAUF-215D	PAU optic + Fiber Patch cable 15 m SC/APC. CPR Dca	1
8013	PAUF-220D	PAU optic + Fiber Patch cable 20 m SC/APC. CPR Dca	1
8014	PAUF-225D	PAU optic + Fiber Patch cable 25 m SC/APC. CPR Dca	1
8015	PAUF-230D	PAU optic + Fiber Patch cable 30 m SC/APC. CPR Dca	1
8016	PAUF-240D	PAU optic + Fiber Patch cable 40 m SC/APC. CPR Dca	1
8017	PAUF-255D	PAU optic + Fiber Patch cable 55 m SC/APC. CPR Dca	1
8018	PAUF-270D	PAU optic + Fiber Patch cable 70 m SC/APC. CPR Dca	1

FIBER OPTIC CABLES
PATCH CABLE AND PIGTAILS

8222	LFO-002	Patch cable SC/APC-SC/APC. Cover 1.9 mm. Length 2 m	1
8073	LFO-010	Patch cable SC/APC-SC/APC 1 fiber. CPR Dca. Length 10 m	1
8074	LFO-015	Patch cable SC/APC-SC/APC 1 fiber. CPR Dca. Length 15 m	1
8075	LFO-020	Patch cable SC/APC-SC/APC 1 fiber. CPR Dca. Length 20 m	1
8076	LFO-025	Patch cable SC/APC-SC/APC 1 fiber. CPR Dca. Length 25 m	1
8223	PTI-015	Pigtail SC/APC G657A2 900 um. Length 1.5 m. LSZH-FR	10

TIGHTENED OPTICAL FIBERS CABLE EUROCLASS Dca

8039	CFA-002D	2 optical fibers cable SM G657A2 LSZH-FR indoor. Ivory. CPR Dca	250 m
8040	CFA-102D	2 optical fibers cable SM G657A2 LSZH-FR-UV indoor/outdoor. Black. CPR Dca	250 m
8041	CFA-202D	2 optical fibers cable SM G657A2 spiral-reinforced steel cover LSZH-FR-UV indoor/outdoor. Black. CPR Dca	250 m

TIGHTENED OPTICAL FIBERS MULTI-CABLE EUROCLASS Dca

8042	CFA-012D	12 optical fibers SM cable LSZH-FR-UV indoor/outdoor. Black. CPR Dca	* to cut
8043	CFA-024D	24 optical fibers SM cable, 4 tubes x6 fibers LSZH-FR-UV indoor/outdoor. Black. CPR Dca	* to cut
8044	CFA-048D	48 optical fibers SM cable, 6 tube x8 fibers LSZH-FR-UV indoor/outdoor. Black. CPR Dca	* to cut
8200	CCM-001	* Cutting the cable by metres	


PAUF-002

PAUF-1xxD

PAUF-2xxD

LFO-002

LFO-025

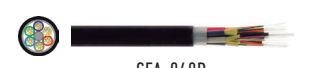
PTI-015

CFA-002D

CFA-102D

CFA-202D

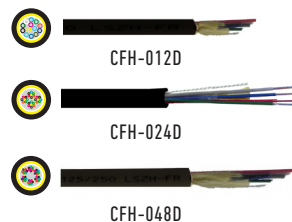
CFA-012D

CFA-024D

CFA-048D

OPTICAL FIBER NETWORK

LOSSE TUBE OPTICAL FIBERS MULTI-CABLE EUROCLASS Dca

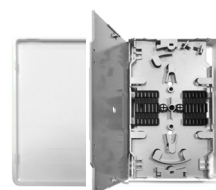
8045	CFH-012D	12 optical fibers SM cable, monotube LSZH indoor. Black. CPR Dca	* to cut
8046	CFH-024D	24 optical fibers SM cable, 4 sub-tubes x6 fibers LSZH indoor. Black. CPR Dca	* to cut
8047	CFH-048D	48 optical fibers SM cable, 6 sub-tubes x8 fibers LSZH indoor. Black. CPR Dca	* to cut
8200	CCM-001	* Cutting the cable by metres	



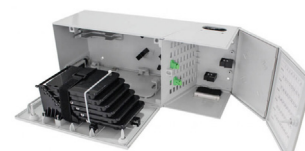
ACCESSORIES

BOXES AND TRAYS

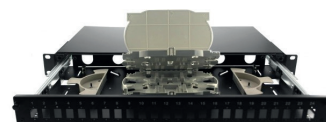
8239	RSE-006	Inner fibre box with 12 fusion trays, 160x110x30 mm. White	1
8240	RSE-012	Inner fibre box with 2 trays of 6 fusions, 180x255x60 mm. Beige	1
8241	RSE-024	Inner fibre box Indoor/outdoor with 12/24 splice tray. IP67 4 input/output ports	1
8295	RSE-121	Inner fibre box with 12 fusion trays, 126x200x50 mm. ABS+PC white	1
8293	CTO-048	Multi-operator box 48 ports SC/APC (Operator/Client Space) 450x180x150 mm	1
8297	PFO-124	19" telescopic fiber tray with 24 SC/LCdx front, 2 trays x 12 fusions (without adapters)	1
8296	FFO-024	Front 24 adapters duplex for PFO-124 tray	1



RSE-006



CTO-048



PFO-124



FFO-024



ADF-103



CMF-100

ADAPTERS AND CONNECTORS

8243	ADF-102	Zirconia SC/APC adapter with side fixings, simplex	25
8292	ADF-103	SC-SC/APC SM adapter without fixing screws, simplex Zirconia, green colour for multi-operator CTO box	25
8291	ADF-104	SC-SC/APC SM adapter with fixing screws, duplex, zirconia, green colour	20
8242	CMF-100	SC/APC universal mechanical connector, for 0.9-2-3 mm cables or 3x2 mm flat cable	1
8271	ADF-001	Kit 5 pcs. duplex SC/LC keystone adapters	1
8290	TA-001	Bag of 50 screws for attaching adapters ADF-102 and ADF-104	50

OUTLETS

2582	ARTU-F01	SC/APC outlets with hinged dust cover	10
------	----------	---------------------------------------	----



ADF-001



ARTU-F01

DATA CABLE NETWORK

CABLES UTP EUROCLASE Cca

2497	CT6A-CUD	Cable CAT6A UTP LSZH cable Cu conductor. White. CPR Cca. Pull box Packaging	305 m
------	----------	---	-------



CABLES UTP EUROCLASE Dca

2382	CT6-5CUD	Cable CAT6 UTP LSZH cable Cu conductor. White. CPR Dca	500 m
2496	CT6-CUD	Cable CAT6 UTP LSZH cable Cu conductor. White. CPR Dca. Pull box Packaging	305 m
2492	CT6-CAD	Cable CAT6 UTP LSZH cable Cu conductor. White. CPR Dca. Pull box Packaging	305 m



ACCESORIOS

8249	PPU-024	24 Keystone ports empty pannel with back frame	1
8250	PPU-124	Integrated pannel 24 RJ45 CAT6 UTP 180° back frame	1
8299	CTR-146	Terminal socket phone-data. CAT6 1 port with dust cover (includes keystone)	1
8253	CHR-045	RJ45 Keystone female connector CAT6 UTP 90° Mounting without tools. White	1
8254	CMP-045	RJ45 Keystone female connector CAT6 UTP 180° Mounting without tools. White	1
8252	CMR-045	RJ45 male connector CAT6 UTP	100

SWITCHES ETHERNET 8 PORTS

8342	SW8-100	Switch ethernet 8 ports 10/100M	1
8343	SW8-1000	Switch ethernet 8 ports 10/100/1000M	1



CT6A-CUD
CT6-CUD/CAD



PPU-024
PPU-124



CTR-146

CHR-045



CMP-045

CMR-045



SW8

BÁSICO TELEPHONE NETWORK

Ref.	Modelo	Descripción	Cant./Emb.
------	--------	-------------	------------

MULTIPLEXORES

208263	MPP-102	1 input / 8 outputs RJ45 UTP CAT6 shielded passive multiplexer	1
--------	---------	--	---

CABLES

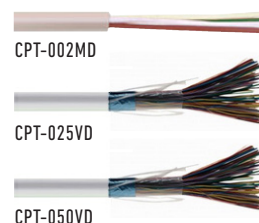
8264	CPT-002N	Cable 2 paire PE outdoor black. CPR Eca	250 m
8022	CPT-002MD	Cable 2 pairs PVC indoor ivory. CPR Dca	500 m
8021	CPT-025VD	Multi-cable 25 pairs indoor. LSZH. CPR Dca	*to cut
8020	CPT-050VD	Multi-cable 50 pairs indoor. LSZH. CPR Dca	*to cut
8200	CCM-001	* Cutting the cable by metres	

ACCESORIOS

8255	RPT-005	Strip 5 pairs CAT3	1
8256	RPT-010	Strip 10 pairs CAT3	10
8257	SRT-005	Support 1 strip of 5 pairs for RPT-005	10
8258	SRT-010	Support 1 strip of 10 pairs for RPT-010	10
8259	SRT-100	Support 10 strips of 10 pairs	1
208260	CPT-100	Label holder 10 pairss	10
8269	ART-100	Telephone distribution box. Support 10 strips of 10 pairs	1



MPP-102



CPT-002MD

CPT-025VD

CPT-050VD



RPT-005

RPT-010



ART-100



SRT-005



Novedad



Hasta Fin de Existencias

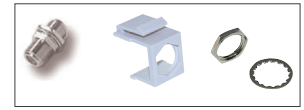
ACCESSORIES

EURO

8270	PPU-048	48 Keystone ports empty panel with back frame	1
8272	CFH-100	Kit of 5 pcs Keystone F-F female adapters + washers + F-F splicer connector	1



PPU-048



CFH-100

TOOLS AND ACCESSORIES

8286	UCU-100	RJ11, RJ12, RJ45 Metal Crimping tool	1
8288	PFI-103	Optical fibre stripper 3 stripping, sheathed, 900 um, 250 um	1
8275	TCK-100	Ergonomic scissors for cutting kevlar	1
8276	KIE-100	Fibre preparation kit splicing and connectorisation WITHOUT fibre cutter	1
8277	KIE-101	Fibre preparation kit splicing and connectorisation WITH fibre cutter	1
8278	CPF-100	Precision fibre optic cleaver	1
8279	PFI-105	Optical fibre stripping machine for outer jacket Allows for circular, longitudinal and helical cutting	1
8280	PEM-045	Fusion joint protector 45 mm long	12
8281	EMF-125	Mechanical fibre optic splicer IL < 0.5 dB. 40x4x4 mm	12



UCU-100



PFI-103



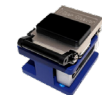
TCK-100



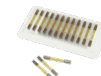
KIE-100



KIE-101



CPF-100



EMF-125

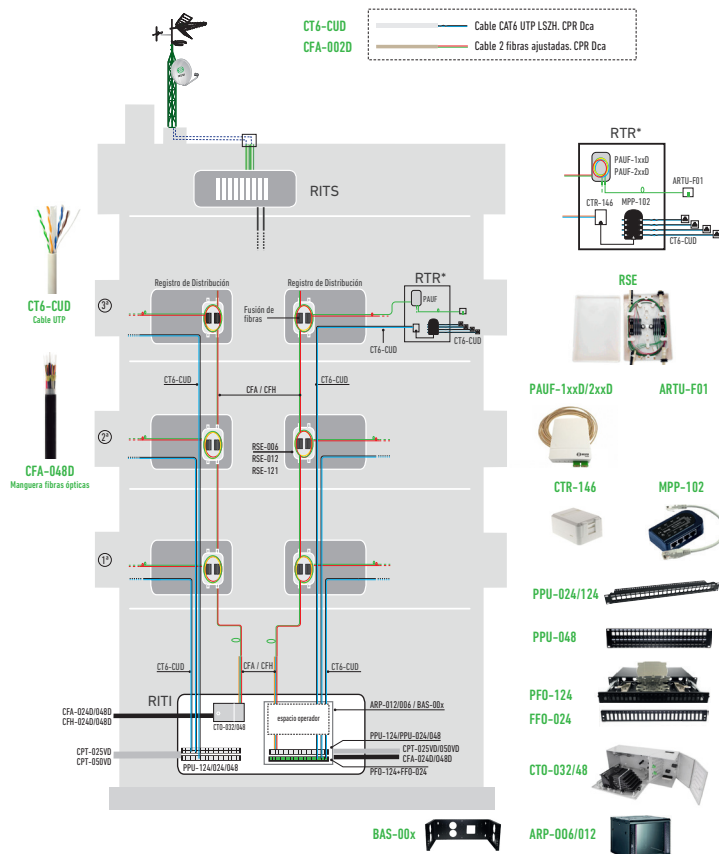


PEM-045

Installation example

TELEPHONY
OPTICAL FIBER

RITI TO RTR DISTANCE (PAU) < 90 mts
N° PAUs > 20

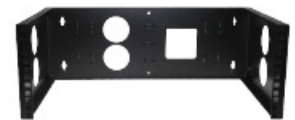


RACK CABINETS AND SUPPORTS
EURO

Ref.	Model	Description	Quant./Pack	€/ Ud
RACK CABINETS				
8228	ARP-006	Rack cabinets 19" 6U 600x600x370 mm Glass door. Mounted	1	
8229	ARP-012	Rack cabinets 19" 12U 600x600x635 mm Glass door. Mounted	1	
SUPPORTS AND PANNELS				
8226	BAS-004	Rack support 19" 4U 500x250x178 mm, wall fixing	1	
8244	PCR-001	Blind panel for rack cabinet	1	
8245	PPR-001	Cable entry panel for rack cabinet	1	



ARP



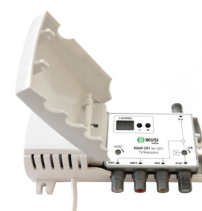
BAS

STAND ALONE MODULATORS & ENCODER IP

Ref.	Model	Description	Quant./Pack.	€ / Ud
------	-------	-------------	--------------	--------

ANALOGUE MODULATORS

3031	MAW-201	Stand-alone analogue TV multi-standard VHF/UHF modulator	1	
------	---------	--	---	--



MAW-201

HD DIGITAL MODULATORS

3032	MOD-203	Modulator HDMI→COFDM Loop Through HDMI.	1	
------	---------	--	---	--


ENCODER IP

4325	ENC-108	Encoder IP 8 inputs HDMI	1	
------	---------	--------------------------	---	--



The first TV Smart Headend

- License Free
- Internal satellite and terrestrial multiswitch included. Easy remote operation, no cabling needed
- Easy set up and commissioning, fastest in the market
- Programming and control through LAN or WiFi
- High output density. More than 24 multiplexes in one rack
- Add new services without re-scanning TV sets
- Dual CI modules for descrambling. IP pool technology
- Internal 2x1Gb IPTV output ports. No additional hardware is needed
- Demultiplexing MPTS to SPTS



- High input density. Up to 40 transponders/multiplexes in one rack
- Advanced audio languages management
- Internal DRM, compatible with the leading encryption systems on the market
- Noiseless fan. Auto speed regulation and fully hot-swappable
- Optimal bandwidth management
- Optional redundancy for all modules
- IP Device Manager Software, compatible with Samsung/LG/Philips TVs directly. Others through STB
- Spare IN/OUT/SEC modules management. The whole configuration is transferred automatically to the new module



FAGOR MULTIMEDIA SOLUTIONS SL
Araba Hiribidea 34 . 20500 Arrasate-Mondragón Gipuzkoa, España
Donostia Ibilbidea 28 . 20115 Astigarraga - Gipuzkoa, España
Tel.: +34 943 44 88 95 . www.fagormultimedia.com

Distribuido por:

