EKSELANS BY ITS

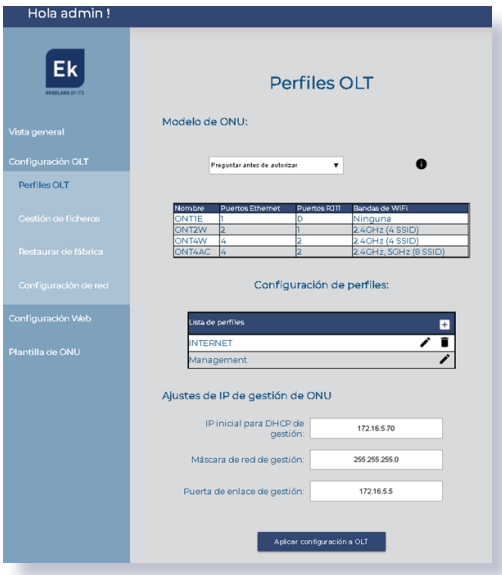
GPON
by Ek

ENTER THE EK WORLD

CONFIGURATION SERVER

SWH-TR

- √ Configuration system for GPON networks in hospitality environments
- √ Complete and intuitive view of the system from the main page
- √ OLT and ONTs unified configuration, including WIFI and VoIP



OLT Configuration

- √ Profile and VLAN configuration
- √ Uplink Port Configuration
- √ Multicast Configuration
- √ OLT restart
- √ OLT Factory Reset

ONTs configuration

- √ Configuration of private ONT parameters: Wifi, VoIP, port assignment to VLAN
- √ Automatically apply template to ONTs in bulk
- √ Manual configuration of ONTs by groups or individually
- √ Management IP allocation to each ONT automatically
- √ Group ONTs firmware update
- √ Resetting ONTs individually or in groups
- √ Factory reset of ONTs individually or in groups

General characteristics

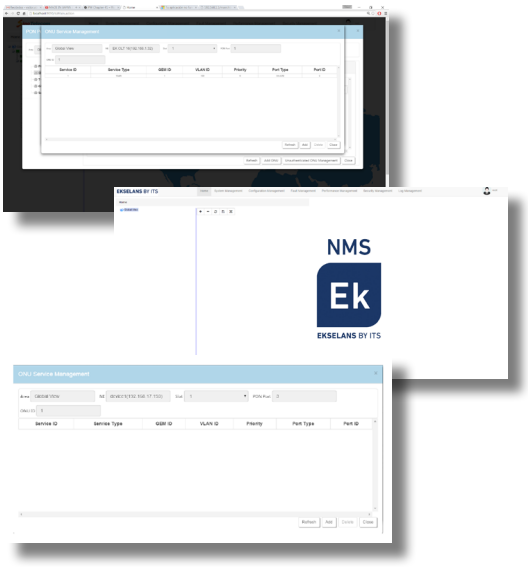
- √ Dedicated server
- √ Management web interface
- √ Import and export of complete system configuration
- √ Guaranteed compatibility with Chrome browser

SOFTWARE PACKAGES

EK NMS

√ The EK NMS is a NMS (Network Management System) that allows the configuration of a GPON network in a simple and intuitive way. Through the software it is possible to manage different networks using one or several OLTs and having access to all user ONTs.

√ The EK NMS allows creating different user profiles and defining the services accessible by the ONT. By this way the processes required by the operator, are reduced. Of course, at the same time, the operator can check the status of the users and their bandwith consumption.



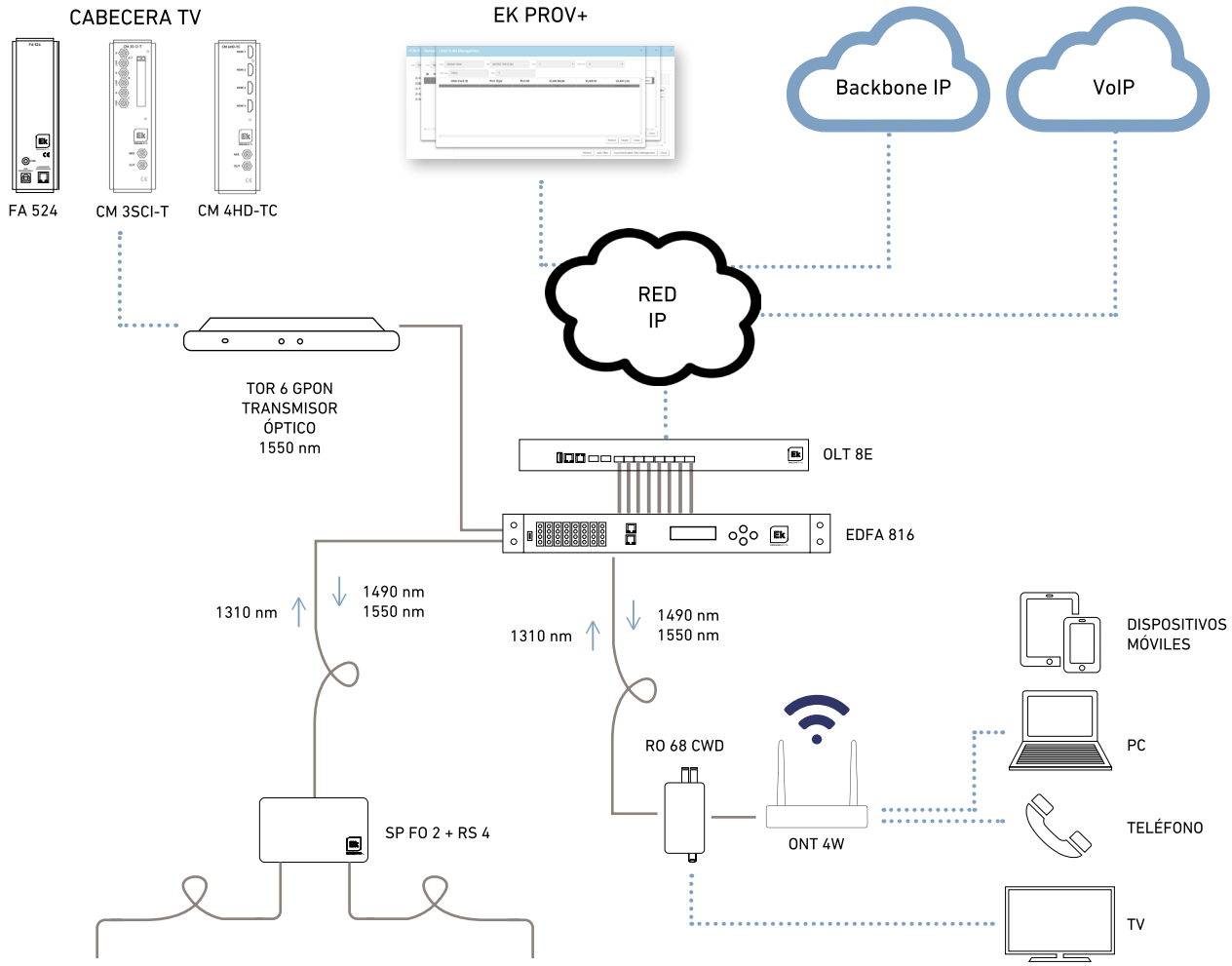
GPON OLTs

REFERENCE	OLT 8
Code	310006
Interfaces	
Switching capacity	60 Gbps
PON Interfaces	8 ports SFP GPON
Uplink Interfaces	2 ports SFP 10GE / 1GE
Other interfaces	1 USB 1 FE management port
GPON specifications	
PON standard and characteristics	ITU-T G.984.x Up to 128 ONTs per each PON port and up to 1000 T-CONT Up to five profiles of T-CONT bandwith management DBA algorithm for adaptative bandwith Different authentication types of ONT's: SN, password, SN+password, Loid, Loid Password
Ethernet specifications	
VLAN	Up to 4000 VLAN inputs VLAN stacking (Q-in-Q) ONT management of VLAN services
STP Protocols	IEEE 802.1D STP IEEE 802.1w RSTP IEEE 802.1s MSTP
Ports	Two-way bandwith control Static and dinamic virtual links LACP agregation Port & traffic mirroring
Multicast	Static multicast IGMP v1/v2/v3 IGMP Snooping / Proxy
QoS	Allows speed limitation on the port or defined service Allows port-based or service-based priority observation and offers 802.1 P and DSCP priority Port and defined service QoS support. Supports eight queues, SP algorithms, WRR or SP + WRR
Device security	ARP-flooding protection ARP-spoofing protection Supports port isolation and ONT isolation control Allows IP , MAC, VLAN and port linkage
Network security	Port broadcast multicast supresion ACL flow filtering mechanism
Management	
Network management	EK NMS CLI command line EK PROV+ provisioning system
General specifications	
Working temperature	-5 - 55ºC
Mains feeding	AC: 100 – 240 VAC / 47 – 63 Hz DC: Input -40V / -75V
Consumption	56W (typ) / 80W (max)
Dimensions	440 x 320 x 44,2 mm
Weight	3,5 kg (aprox.)

OLT 8E

- √ GPON networks headend
- √ Intuitive configuration through EK NMS software and with EK PROV+ provisioning software
- √ Compatbile with Ekselans ONTs and main brands in the market
- √ 8x downlink GPON ports
- √ 2x GE/10GE uplink ports
- √ ITU-T G.984.x & ITU-T G.988 standards compliant. Meets all requirements for creating ultra high speed FTTH networks
- √ 2,5Gbps maximum downlink / 1,25 Gbps uplink speed
- √ Remote management through SNMP
- √ ONTs remote management through OMCI protocol
- √ 1 rack unit

APPLICATION EXAMPLE



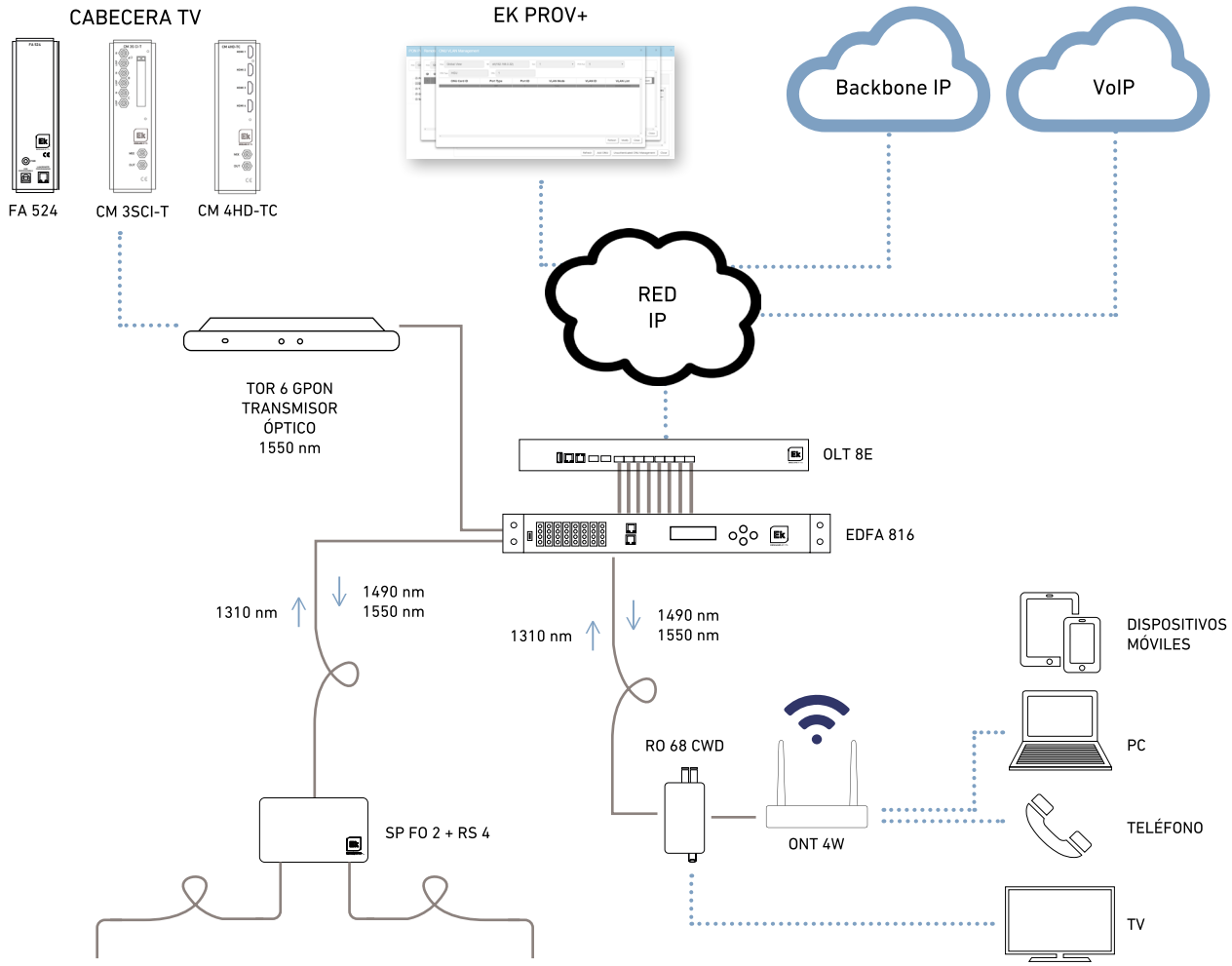
GPON OLTs

REFERENCE	OLT 16E
Code	310009
Interfaces	
Switching capacity	60 Gbps
PON Interfaces	16 ports SFP GPON
Uplink Interfaces	2 ports SFP 10GE / 1GE 6 ports SFP 1 GE
Other interfaces	1 USB 1 FE management port
GPON specifications	
PON standard and characteristics	ITU-T G.984.x Up to 128 ONTs per each PON port and up to 1000 T-CONT Up to five profiles of T-CONT bandwith management DBA algorithm for adaptative bandwith Different authentication types of ONT's: SN, password, SN+password, Loid, Loid Password
Ethernet specifications	
VLAN	Up to 4000 VLAN inputs VLAN stacking (Q-in-Q) ONT management of VLAN services
STP Protocols	IEEE 802.1D STP IEEE 802.1w RSTP IEEE 802.1s MSTP
Ports	Two-way bandwith control Static and dinamic virtual links LACP agregation Port & traffic mirroring
Multicast	Static multicast IGMP v1/v2/v3 IGMP Snooping / Proxy
QoS	Allows speed limitation on the port or defined service Allows port-based or service-based priority observation and offers 802.1 P and DSCP priority Port and defined service QoS support. Supports eight queues, SP algorithms, WRR or SP + WRR
Device security	ARP-flooding protection ARP-spoofing protection Supports port isolation and ONT isolation control Allows IP , MAC, VLAN and port linkage
Network security	Port broadcast multicast supresion ACL flow filtering mechanism
Management	
Network management	EK NMS CLI command line EK PROV+ provisioning system
General specifications	
Working temperature	-5 - 55°C
Mains feeding	AC: 100 – 240 VAC / 47 – 63 Hz DC: Input -40V / -75V Included redundant power supply
Consumption	56W (typ) / 80W (max)
Dimensions	440 x 320 x 44,2 mm
Weight	3,5 kg (aprox.)

OLT 16E

- √ GPON networks headend
- √ Intuitive configuration through EK NMS software and with EK PROV+ provisioning software
- √ Compatbile with Ekselans ONTs and main brands in the market
- √ 16x downlink GPON ports
- √ 2x GE/10GE uplink ports + 6x GE uplink ports
- √ 2x 10GE/GE uplink ports
- √ ITU-T G.984.x & ITU-T G.988 standards compliant. Meets all requirements for creating ultra high speed FTTH networks
- √ 2,5Gbps maximum downlink / 1,25 Gbps uplink speed
- √ Remote management through SNMP
- √ ONTs remote management through OMCI protocol
- √ Redundant power supply
- √ 1 rack unit

APPLICATION EXAMPLE



EDFAs GPON FOR RF OVERLAY

EDFA 812 / 816 / 1617 / 3219

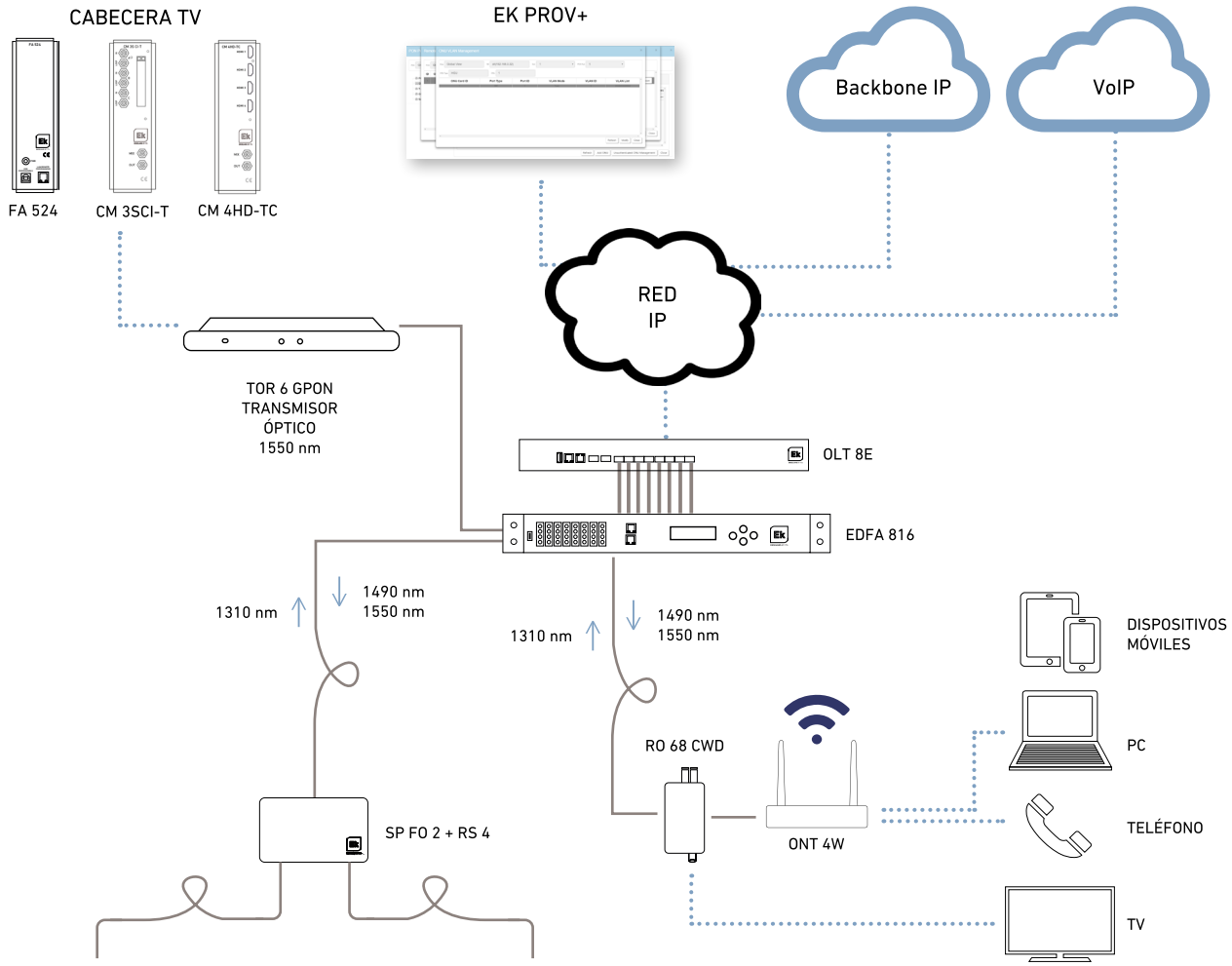
- √ Compatible with FTTx PON (EPON / GEPON / GPON)
- √ Models of 8, 16 and 32 optical output ports with powers from 8 to 19 dBm per port
- √ Low noise pre amp Very low degradation of CNR and MER
- √ Avoid the need to cascade different EDFAs
- √ Very low noise figure
- √ Redundant power supply
- √ Control and monitoring via SNMP

REFERENCE		EDFA 816	EDFA 812	EDFA 1617	EDFA 3219
Code		310010	310023	310011	310022
Connections					
Number of optical ports for OLT	N.	8	8	16	32
Number of output optical ports	N.	8	8	16	32
Input					
Working wavelength (CATV)	nm	1540 - 1563			
Pass wavelength (OLT)	nm	1310 / 1490			
Input optical power (CATV)	dBm	±10			
Output					
Total output optical power	dBm / mW	27/500	24/250	31/1260	37/5000
Output optical power adjustment	dB	0...6			
Optical output power per port	dBm	16	12	16,5	19,2
Difference of each otput port optical power	dB	±0,5			
Attenuation working wavelength (CATV)	dB	<0,8			
OLT wavelength attenuation	dB	<0,8			
Optical power monitor	dB	-20			
Polarization dependence Loss / Gain	dB	0,3 / 0,4			
Noise Figure	dB	<5,5			
IN - OUT					
CATV - OLT Isolation	dB	>40			
IN - OUT Isolation	dB	30			
Optical connectors		SC/APC			
Mains feeding					
Voltage	Vac / Hz	90-265 / 50-60			
Consumption	W	<50			
Number of PSUs	N.	2			
General					
Management interface		SNMP - RJ45			
Serial Interface		RS-232			
Puertos		Ethernet - LAN RJ45			
Display / Buttons		LCD /4			
STATUS LEDs		Pump, Input, Alarm, Power 1, Power 2			
Working temperature	ºC	-5...65			
Dimensions	mm	1xU Rack 19"			2xU Rack 19"

EDFA 812 / 816

EDFA 1617 / 3219

APPLICATION EXAMPLE



OPTICAL TRANSMITTER FOR RF OVERLAY HEADBOARDS

TOR 6 GPON · TOR 3 GPON FI

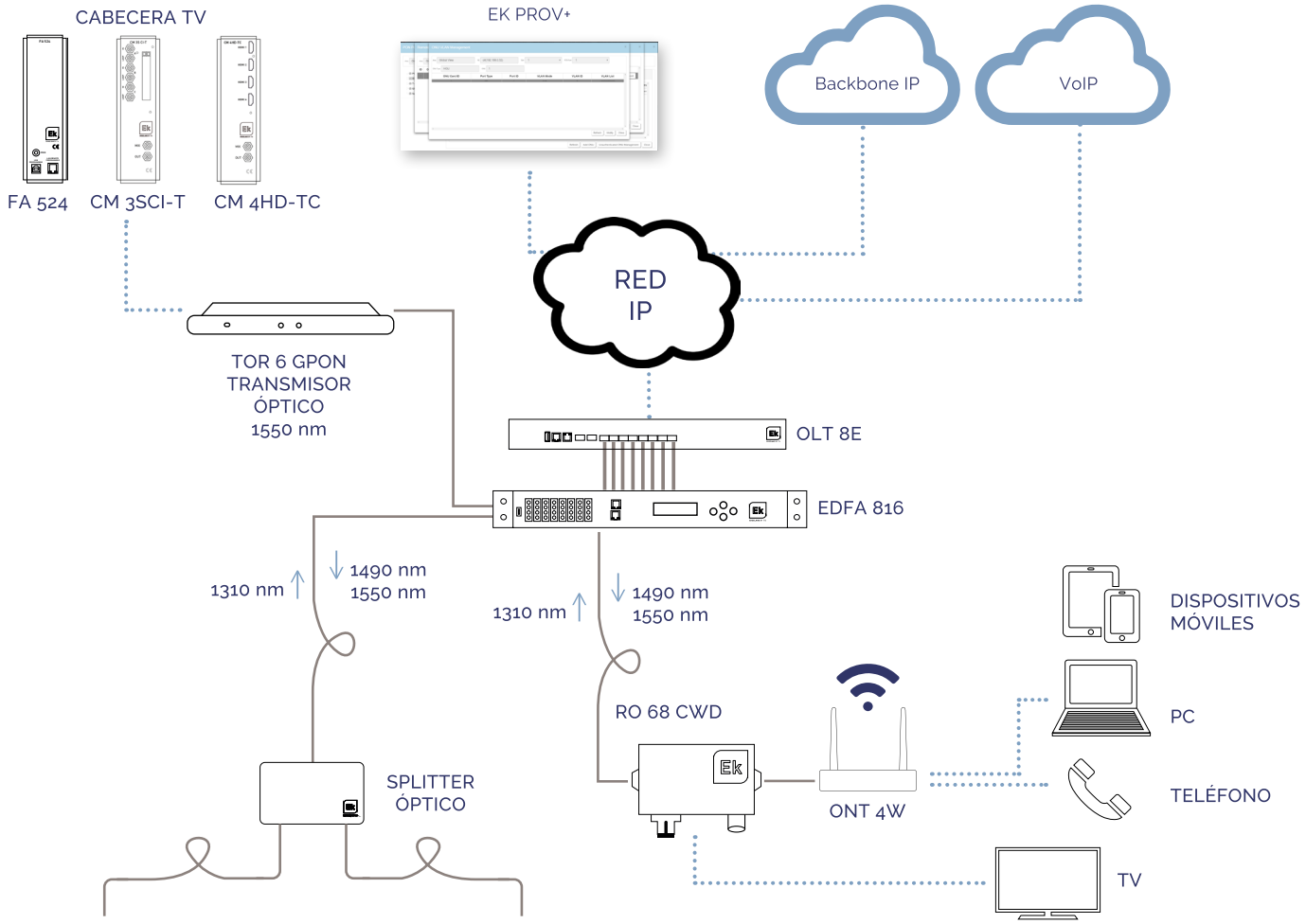
- √ 1 GHz and 2.6 GHz optical transmitters compatible with GPON installations
- √ Allows radio frequency signal distribution within the GPON network
- √ One 19 "rack unit

REFERENCE		TOR 6 GPON	TOR 3 GPON FI
Code		271007	271020
RF Input			
Frequency	MHz	47 - 1000	47 - 2600
Flatness	dB	≥1	≥1
Input level (CAG)	dBµV	77 - 87*	77 - 87*
Return loss	dB	≥16	≥16
Input connector		F	F
Output test	dB	-20	-20
Optical output			
Wavelength	nm	1550	1550
Optical power	dBm	6	3
Light source		DFB	DFB
Optical return loss	dB	>50	>50
Optical connector		SC/APC	SC/APC
GENERAL			
Feeding	Vac / Hz	90-265 / 50-60	90-265 / 50-60
Consumption	W	<14	<14
Working temperature	ºC	-20...55	-20...55

* For 60 analog channels

TOR 6 GPON
TOR 3 GPON FI

APPLICATION EXAMPLE



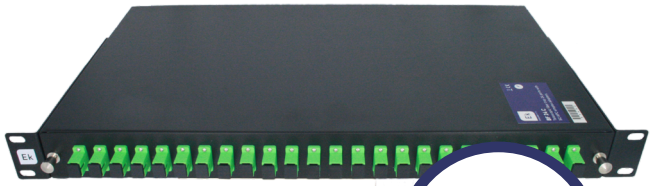
RACK TRAY FOR FIBER OPTIC CONNECTIONS

BF 24 S · BF 24 C · BF 48 C

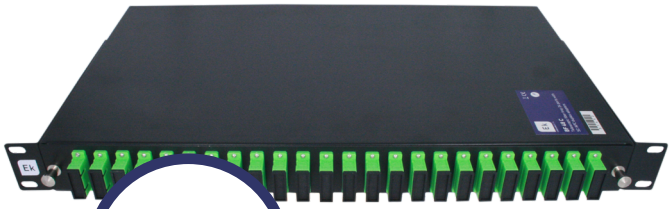
REFERENCE		BF 24 S	BF 24 C	BF 48 C
Code		361011	361012	361013
Number of mounted adapters	N.	0	24	24
Type of adapters		SC - Simplex		SC - Duplex
Fiber capacity		≤24	≤24	≤48
Height	U	1	1	1
Accessories		4x Rack mount nuts and bolts 8x Nylon cable ties to hold the fibers 4x Rubber plugs to close unused fiber cable inlets / outlets 1x Bag with 24/48 45mm fiber heat shrink protectors 1x Support / Cassette for fiber fusion		
Dimensions (W x D x H)	mm	483 x 240 x 44		

- √ Metal handles. Closing system (The tray offers strength so that the drawer does not open easily).
- √ Up to 4 inputs / outputs for fiber hose. Maximum diameter 23mm
- √ Retainer screw holding aramid and cassette for fusions

BF 24 S



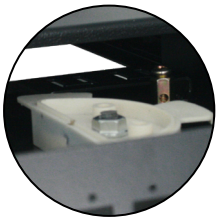
BF 24 C



BF 48 C

Metal handles. Closing system (The tray offers strength so that the drawer does not open easily).

Up to 4 inputs / outputs for fiber hose. Maximum diameter 23mm



Retainer screw holding aramid and cassette for fusions

INCLUDED ACCESSORIES

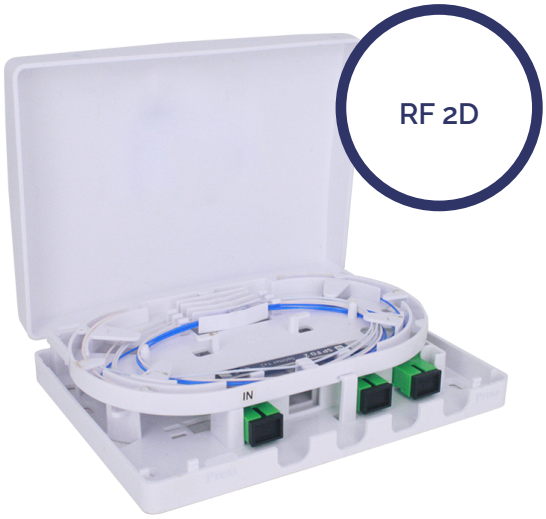
Code	A SCAPC S	T AD	TP AD S
Reference	363001	363010	363011
Description	Fusion tray adapter BF 24 S / Fiber boxes	SC / APC Simplex Adapter Screw	Cap for front telescopic tray SC / APC Simplex connector
Packaging	50/2000	48	100
Photo			

OPTICAL SPLITTERS

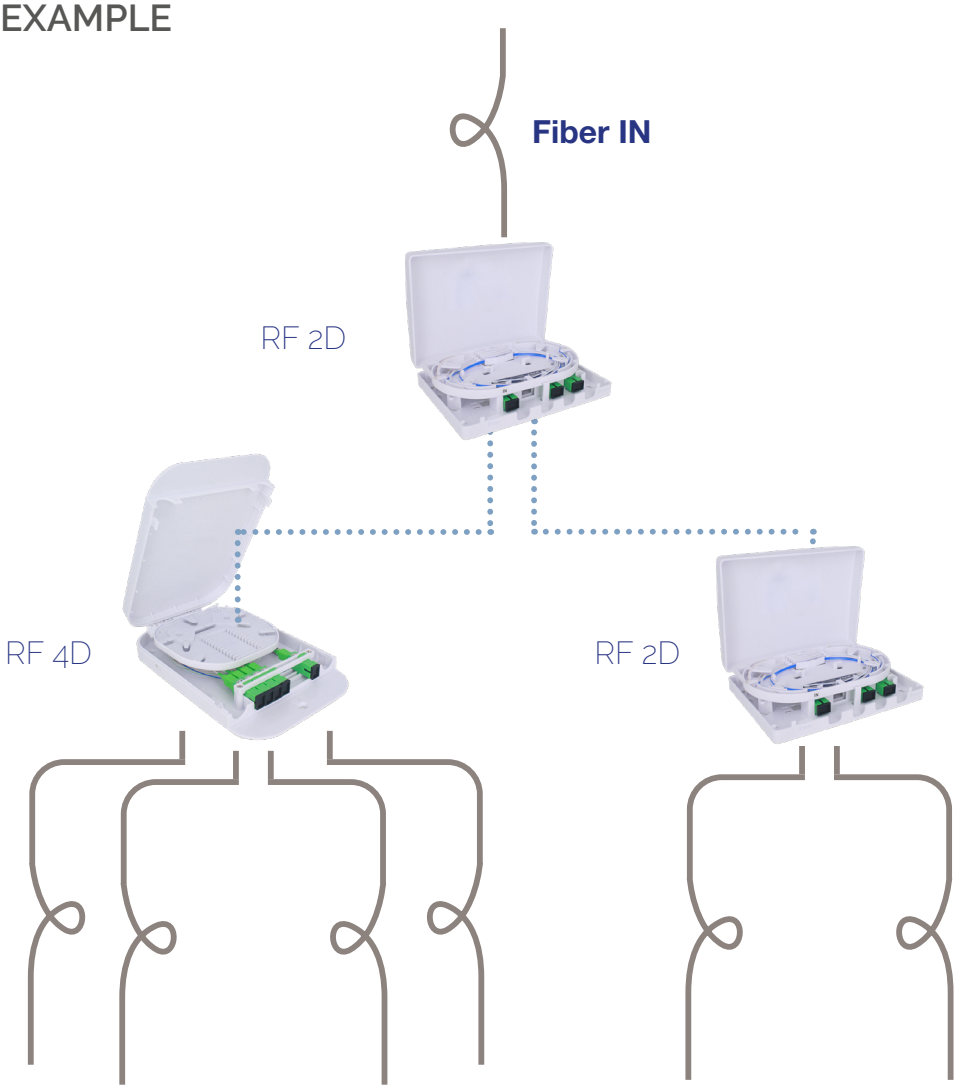
RF 2D · RF 4D

√ Repartidores de fibra de 2 y 4 salidas

REFERENCE		RF 2D	RF 4D
Code		272001	271002
Outputs	Nº	2	4
COptical connector		SC / APC	SC / APC
Wavelength	nm	1310 - 1550	
Insertion loss	dBm	≤4,1	≤7,5
Return loss	A/W	≥55	
Directivity		≥55	
Uniformity	dBm	≤0,6	≤0,8
PDL			
Working temperature	ºC	-5 ...+45	



APPLICATION EXAMPLE



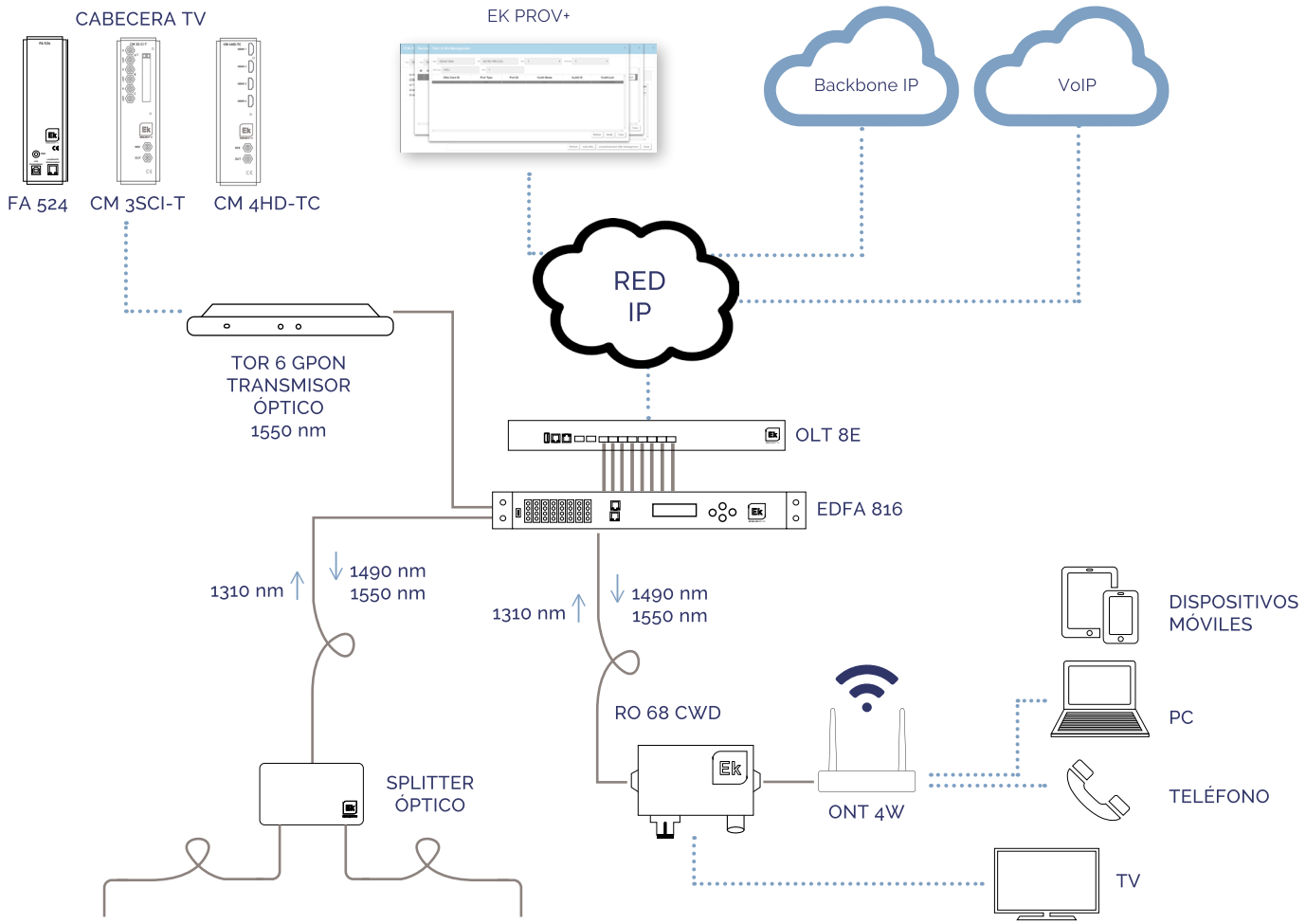
OPTICAL RECEIVERS FOR GPON INSTALLATIONS

RO 68 CWD · RO 88 CWD

- √ It allows the reception of optical signal and can continue distributing it in radio frequency
- √ Compatible with GPON networks. Wavelength step 1310/1490 nm
- √ RO 68 CWD: passive behavior. Does not need power

REFERENCE		RO 68 CWD	RO 88 CWD
Code		270005	270004
Entrada óptica			
Wavelength	nm	1540 - 1563	1540 - 1563
Pass wavelength	nm	1310 / 1490	1310 / 1490
Optical input level	dBm	+2/-12 digital (≥36dB) +2/-6 analogical (CNR >45dB)	+2/-20 digital (≥36dB) +2/-10 analogical (CNR >45dB)
AGC rank	dBm	-	0 / -12
Efficiency	A/W	≥0,80/1310 nm ≥0,85/1550 nm	≥0,85/1310 nm ≥0,9/1550 nm
Optical return loss	dB	>50	>55
Optical connector	-	SC/APC (IN/OUT)	SC/APC (IN/OUT)
Salida RF			
Frequency range	MHz	47 - 862	47 - 862
Flatness	dB	≥1.5	≥0,75
Output level	dBµV	68 @ -1dBm	>80
Return loss	dB	≥14	≥14
Output connector	-	F	F
General			
Voltage feeding	Vdc	No requiere	12 (F. alimentación incluida)
Consumption	W	-	≤3
Working temperature	°C	-20 - +55	-20 - +55

APPLICATION EXAMPLE



EKSELANS BY ITS

GPON / FTTH OPTICAL NETWORK TERMINAL

REFERENCE	ONT 1
Code	310002
Throughput	Dowstream: 2.488Gbps Upstream: 1.244Gbps
Connector	SC/PC
Optical specifications	ITU-T G.984.2 Clase B+
Standards	ITU-T G.984.x (G.984.5 support) FCC 47 CFR Part 15, Class B FDA 21 CFR 1040.10 & 1040.11, Class I IEEE 802.3 Ethernet 802.1 q/p VLANs
Optical wavelength and power	**Downlink** Wavelength: 1490nm Sensitivity: -27dBm Saturation: -8dBm **Uplink** Wavelength: 1310nm Transmission power: 0.5 - 5dBm
Fiber mode	G.652 Monomode
Others	64 GEM ports Flexible mapping between GEM ports and T-CONTs Queues priority Upstream traffic management FEC (Forward Error Correction) DBA Remote firmware upgrade
Ethernet specifications	
Standards	IEEE802.1
Interfaces	1x10/100/1000BASE-T port. RJ45 Connector Auto negotiation Auto MDI/MDIX
Router functionality (switching & routing)	Bridging & Switching (802.1d) 802.1p DSCP mapping VLAN labeling and filtering VLAN stacking (Q-in-Q) Dying Gasp MACs automathic addressing IGMP v2/v3 Snooping and MLD v2/v3
General specifications	
Working temperature	-5 - 45°C
Voltage	12V DC,0.5A max
Dimensions	110 x 96 x 52 mm
Weight	300g (aprox.)

ONT 1

- √ GPON Optical Network Unit for SOHO and residential pursposes
- √ Market routers compliant media converter
- √ 1x Autoadaptative 10/100/1000Base-T Ethernet ports
- √ Compatible with ITU-T G.984.x standard. Meets all requirements for creating ultra high speed FTTH networks
- √ 2,5Gbps maximum downlink / 1,25 Gbps uplink speed
- √ Local and remote management. OMCI, Web, CLI and SNMP

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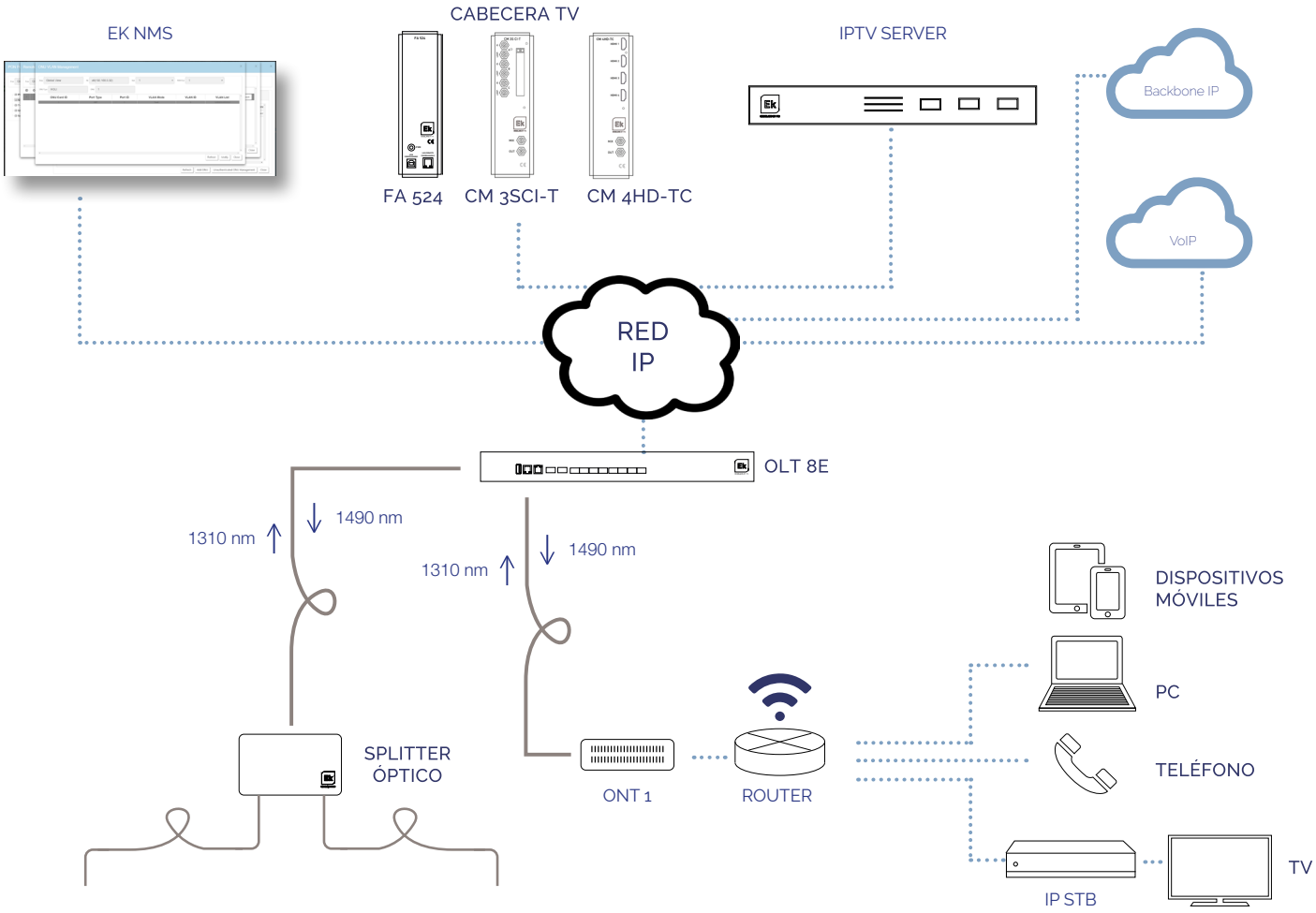
APPLICATION EXAMPLE



EKSELANS BY ITS

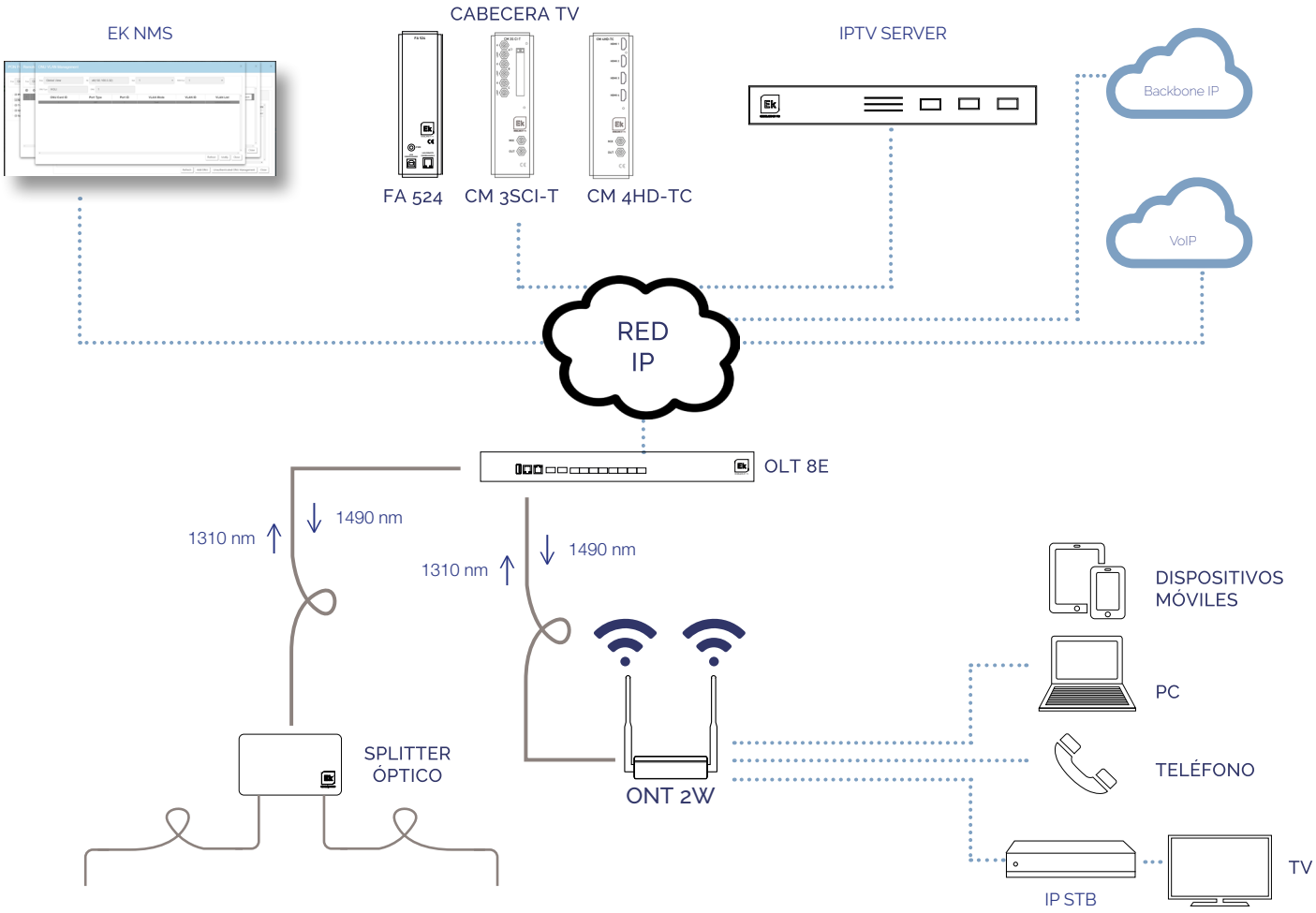
GPON / FTTH OPTICAL NETWORK TERMINAL

REFERENCE	ONT 2W
Code	310032
GPON specifications	
Transfer speed	Dowstream: 2.488Gbps Upstream: 1.244Gbps
Connector	SC/APC
Optical	ITU-T G.984.2 Clase B+
Standards	ITU-T G.984.x (G.984.5 support) FCC 47 CFR Part 15, Class B FDA 21 CFR 1040.10 & 1040.11, Class I IEEE 802.3 Ethernet 802.1 q/p VLANs
Optical wavelength and power	**Downlink** Wavelength: 1490nm Sensitivity: -28dBm Saturation: -8dBm **Uplink** Wavelength: 1310nm Transmission power: 0.5 - 5dBm
Fiber mode	G.652 Monomode
Others	32 T-CONTs 256 GEM Flexible mapping between GEM ports and T-CONTs Upstreamd and downstream FEC (Forward Error Correction) Automathic discovery of SN and password activation AES-128 encription with keys generation and conmutation 802.1p service upstream
Ethernet specifications	
Standards	IEEE802.3 IEEE802.3au IEEE802.3x
Interfaces	2 ports 10/100/1000BASE-T port. RJ45 Connector Auto negotiation Auto MDI/MDIX
Router functionality (switching & routing)	Bridging & Switching (802.1d / 802.1q) 8 clases de tráfico (802.1p) Control de flujos 802.3n Etiquetado y filtrado de VLAN VLAN stacking (Q-in-Q) IGMP multicast para video IPTV IGMP snooping RSTP IPHOST SSH QOSSP, WRR, SP+WRR Port Mirror
WiFi specifications	
Standard	IEEE 802.11 b/g/n (Up to 300 Mbps troughtput)
Antenna	2x2, 5dBi
EIRP	Max 25dBm
Others	Up to 4 possible SSID's Up to 64 simultaneous connections WEP, WPA-PSK, WPA2-PSK (AES, TKIP) Security MAC filtering
POTS Telephony specifications	
REN	Max 5REN
Connector	1 port RJ11
Call Voltage	65V RMS
Protocols	SIP / MGCP G.711 (A- & u-), G.729, G.726 codec DTMF Calling Echo suppression support, VAD, CNI Call identification, hold call, forward call, 3-users call T.30 & T.38 FAX
General specifications	
Working temperature	-5~45°C
Voltage	12V DC1.5A max
Dimensions	244 x 161 x 41 mm
Weight	500g (aprox.)

ONT 2W

- √ GPON Optical Network Unit for SOHO and residential pursposes
- √ 2 x Autoadaptative 10/100/1000Base-T Ethernet ports
- √ WiFi 2x2 802.11n (Up to 300Mbps of wireless throughput)
- √ 1x POTS telephony port
- √ Allows access to ultra high speed networks: Internet, VoIP and IPTV
- √ Compatible with ITU-T G.984.x standard. Meets all requirements for creating ultra high speed FTTH networks
- √ 2,5Gbps maximum downlink / 1,25 Gbps uplink speed
- √ Local and remote management. OMCI, Web, CLI and SNMP
- √ Compatible and interoperable with the Ekselans by ITS OLTs and other main brands in the market

APPLICATION EXAMPLE



EKSELANS BY ITS

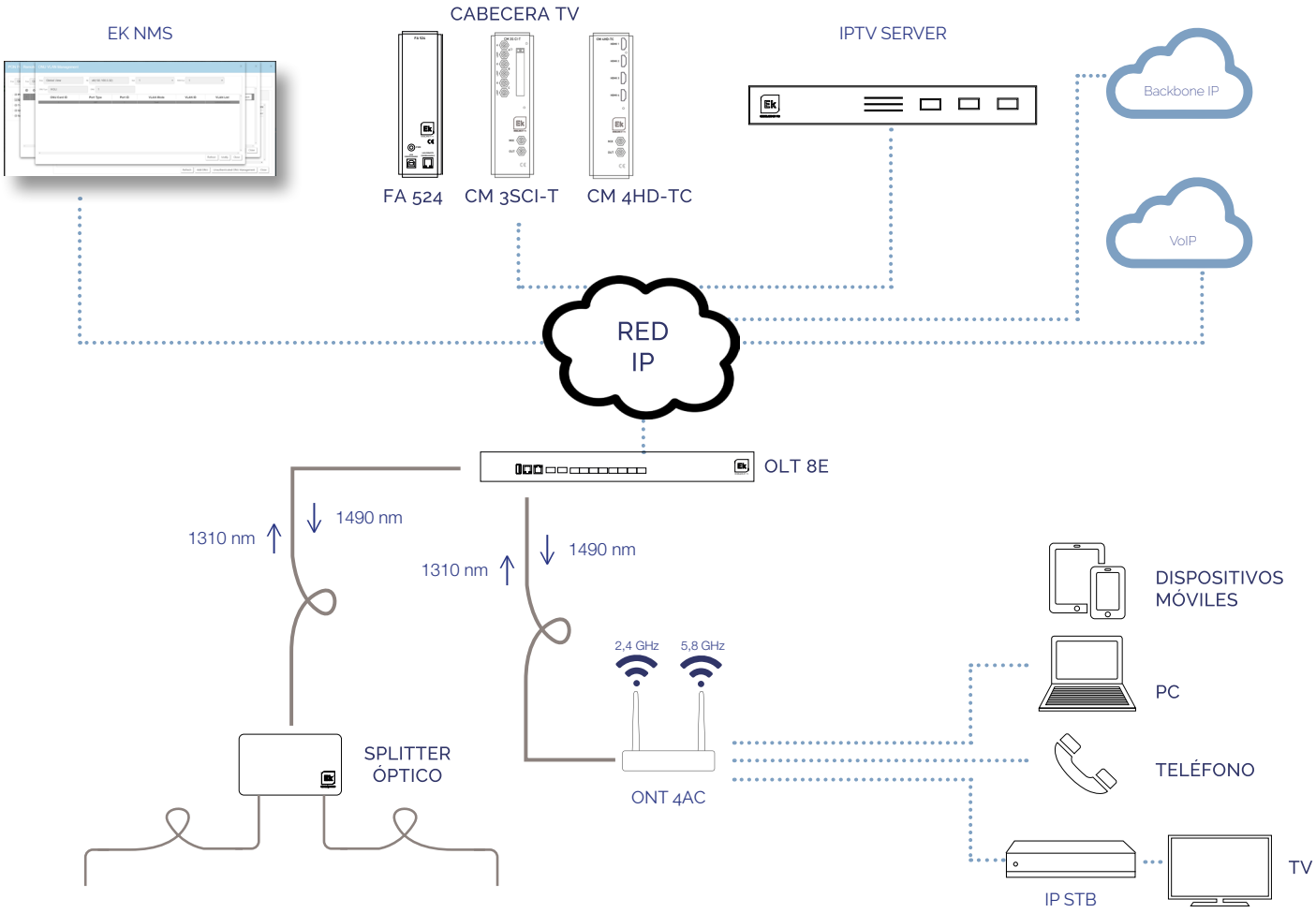
GPON / FTTH OPTICAL NETWORK TERMINAL

REFERENCE	ONT 4 AC
Code	310017
GPON specifications	
Transfer speed	Dowstream: 2.488Gbps Upstream: 1.244Gbps
Connector	SC/APC
Optical	ITU-T G.984.2 Clase B+
Standards	ITU-T G.984.x (G.984.5 support) FCC 47 CFR Part 15, B Class FDA 21 CFR 1040.10 & 1040.11, Class I IEEE 802.3 Ethernet 802.1 q/p VLANs
Optical wavelength and power	Downlink Wavelength: 1490nm Sensitivity: -28dBm Saturation: -8dBm Uplink Wavelength: 1310nm Transmission power: 0.5 - 5dBm
Fiber mode	G.652 Monomode
Others	32 T-CONTs 256 GEM Flexible mapping between GEM ports and T-CONTs Upstreamd and downstream FEC (Forward Error Correction) Automathic discovery of SN and password activation AES-128 encription with keys generation and conmutation 802.1p service upstream
Ethernet specifications	
Standards	IEEE802.3 IEEE802.3au IEEE802.3x
Interfaces	4 ports 10/100/1000BASE-T port. RJ45 Connector Auto negotiation Auto MDI/MDIX
Router functionality (switching & routing)	Bridging & Switching (802.1d / 802.1q) 8 traffic classes (802.1p) Flow control 802.3n VLAN labelling and filtering VLAN stacking (Q-in-Q) IGMP multicast for IPTV video IGMP snooping RSTP IPHOST SSH QOS (SP, WRR, SP+WRR) Port Mirror
WiFi specifications	
Standard	IEEE 802.11 b/g/n (hasta 300 Mbps de transferencia)
Antenna	2x2, 5dBi
EIRP	Max 25dBm
Others	Up to 4 possible SSID's Up to 64 simultaneous connections WEP, WPA-PSK, WPA2-PSK (AES, TKIP) Security MAC filtering
POTS Telephony specifications	
REN	Max 5REN
Connector	2 puertos RJ11
Call Voltage	65V RMS
Protocols	SIP / MGCP G.711 (A- & u-), G.729, G.726 codec DTMF Calling Echo suppression support, VAD, CNI Call identification, hold call, forward call, 3-users call T.30 & T.38 FAX
USB	
Funtion mode	Host / device
Current	Max 1A
Caracteristicas generals	
Working temperature	-5~45°C
Voltage	12V DC1.5A max
Dimensions	244 x 161 x 41 mm
Weight	500g (aprox.)

ONT 4AC

- √ GPON Optical Network Unit for SOHO and residential pursposes
- √ 4x Autoadaptative 10/100/1000Base-T Ethernet ports
- √ WiFi 3x3 802.11b/g/n 2,4GHz and 3x3 802.11n/ac 5,8 GHz
- √ 2x POTS telephony ports
- √ 1 USB port
- √ Allows access to ultra high speed networks: Internet, VoIP and IPTV
- √ Compatible with ITU-T G.984.x standard. Meets all requirements for creating ultra high speed FTTH networks
- √ 2,5Gbps maximum downlink / 1,25 Gbps uplink speed
- √ Local and remote management. OMCI, Web, CLI and SNMP
- √ Compatible and interoperable with the Ekselans by ITS OLTs and other main brands in the market

APPLICATION EXAMPLE



EKSELANS BY ITS

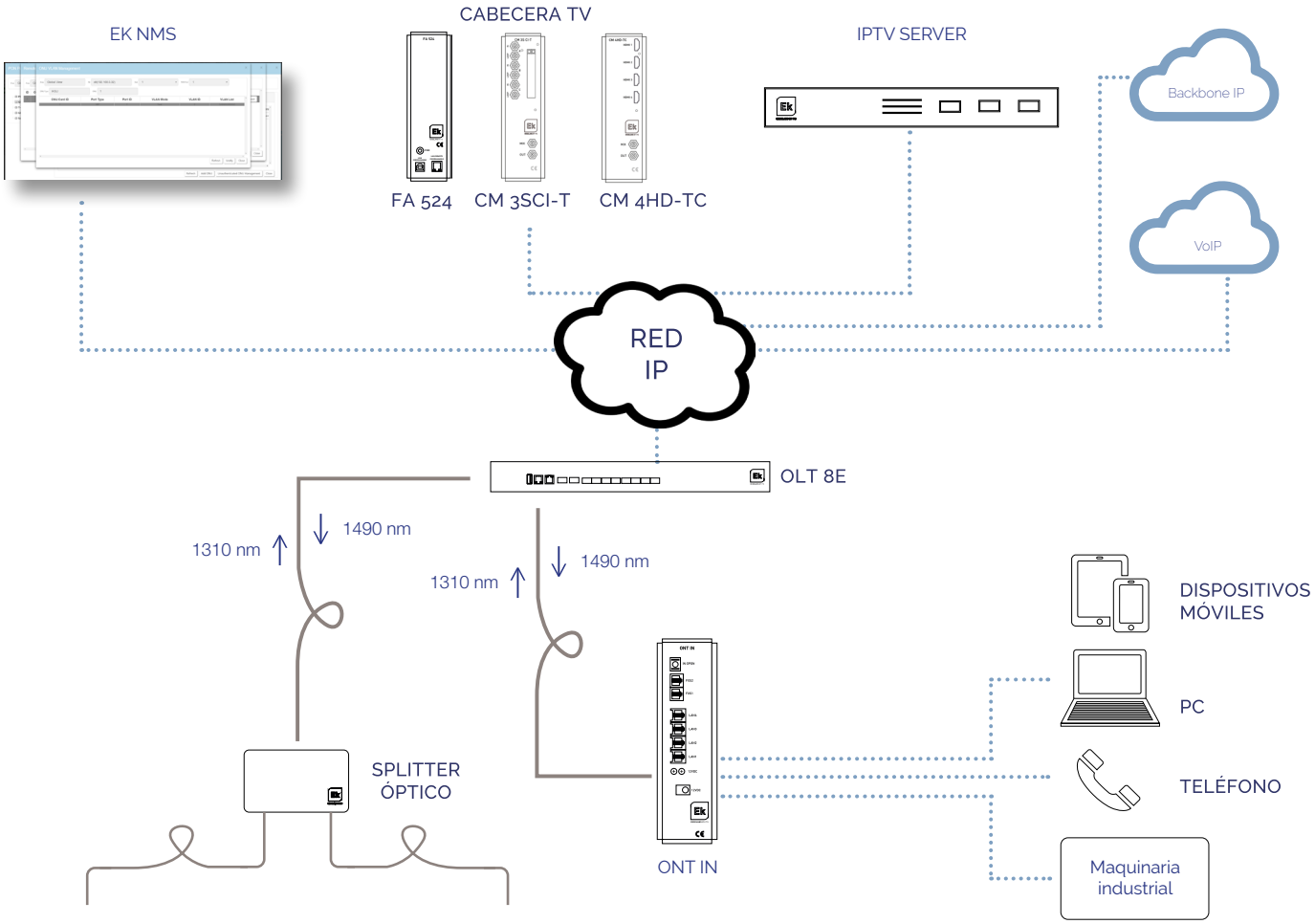
GPON / FTTH OPTICAL NETWORK TERMINAL

REFERENCE	ONT IN
Code	310029
GPON specifications	
Transfer speed	Dowstream: 2.488Gbps Upstream: 1.244Gbps
Connector	SC/APC
Optical	ITU-T G.984.2 Clase B+
Standards	ITU-T G.984.x (G.984.5 support) FCC 47 CFR Part 15, Class B FDA 21 CFR 1040.10 & 1040.11, Class I IEEE 802.3 Ethernet 802.1 q/p VLANs
Optical wavelength and power	Downlink Longitud de onda: 1490nm Sensibilidad: -28dBm Saturación: -8dBm Uplink Longitud de onda: 1310nm Potencia de transmisión: 0.5 ~ 5dBm
Fiber mode	G.652 Monomodo
Others	32 T-CONTs 256 GEM Flexible mapping between GEM ports and T-CONTs Upstreamd and downstream FEC (Forward Error Correction) Automathic discovery of SN and password activation AES-128 encription with keys generation and conmutation 802.1p service upstream
Características Ethernet	
Estándares	IEEE802.3 IEEE802.3au IEEE802.3x
Interfaces	4 ports 10/100/1000BASE-T port. RJ45 Connector Auto negotiation Auto MDI/MDIX
Router functionality (switching & routing)	Bridging & Switching (802.1d / 802.1q) 8 clases de tráfico (802.1p) Control de flujos 802.3n Etiquetado y filtrado de VLAN VLAN stacking (Q-in-Q) IGMP multicast para video IPTV / IGMP snooping RSTP / IPHOST /SSH QOS-SP, WRR, SP+WRR Port Mirror
WiFi specifications	
Standard	IEEE 802.11 b/g/n (hasta 300 Mbps de transferencia)
Antenna	4 conectores SMA para antenas externas
EIRP	Max 25dBm
Others	Hasta 4 SSID posibles Hasta 64 conexiones simultáneas Seguridad WEP, WPA-PSK, WPA2-PSK(AES, TKIP) Filtrado de MACs
POTS Telephony specifications	
REN	Max 5REN
Connector	2 puertos RJ11
Call Voltage	65V RMS
Protocols	SIP / MGCP G.711 (A- & u-), G.729, G.726 codec DTMF Calling Echo suppression support, VAD, CNI Call identification, hold call, forward call, 3-users call T.30 & T.38 FAX
USB	
Funtion mode	Host / device
Current	Max 1A
Características generals	
Working temperature	-5~45ºC
Voltage	12V DC1.5A max
Dimensions	Carril DIN
Weight	900g (aprox.)

ONT IN

- √ Media converter + router for industrial environments
- √ DIN rail installation
- √ Terminal supply
- √ 4 SMA connectors for antennas
- √ WiFi b / g / n / ac 2.4GHz and 5GHz
- √ 4 10/100/1000 ports
- √ 2 POTS ports (telephony)
- √ Local and remote management

APPLICATION EXAMPLE



EKSELANS BY ITS

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