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## K20 Compact Headend

DVBS2 - DVBC, 8 to 16 MUX

### The perfect balance between simplicity and efficiency

Ready to work compact headend that generates QAM multiplex from the services available in TV SAT transponders (DVB-S/S2/S2X). Stand alone solution for transparent transmodulation of any transponder from any of the 4 satellite polarities, and just a electrical plug (PSU included).

It is possible to combine two K20 headends to achieve a greater number of output multiplex. Both devices will be connected in loop mode (cascade), and it can be possible to manage the configuration of the whole solution with one of the K20 units set in master mode.

The headend allows its configuration through a Web interface via Ethernet or WiFi (accessory ref. 216802 required).

<b>Ref.570101</b>	8 transponders	
	<b>Art.Nr</b>	K20-8
	<b>EAN13</b>	8424450212714
<b>Ref.570102</b>	12 transponders	
	<b>Art.Nr</b>	K20-12
	<b>EAN13</b>	8424450212721
<b>Ref.570103</b>	16 transponders	
	<b>Art.Nr</b>	K20-16
	<b>EAN13</b>	8424450212738
<b>Ref.570104</b>	20 transponders (Ref. 570101 + Ref. 570102)	
	<b>Art.Nr</b>	K20-20
	<b>EAN13</b>	8424450221907
<b>Ref.570105</b>	24 transponders (Ref. 570101 + Ref. 570103)	
	<b>Art.Nr</b>	K20-24
	<b>EAN13</b>	8424450221914

## Highlights

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- Easy-to-install solution (Plug & Play): less cables and shorter installation time
- Pre-settings autoconfiguration: the user selects which preloaded configuration wants and the module configures itself
- User web interface: Access to the headend configuration through Ethernet connection or a self-created WiFi network. The interface is perfectly adapted to any device: PC, smartphone or tablet
- Cloning function to replicate configurations between different installations
- Flexible number of input transponders: combination of two K20 units to obtain more transponders (up to 32). In this case, one of the modules will be the master and the other the slave
- Good thermal management thanks to its built-in heat sink and fans

## Main features

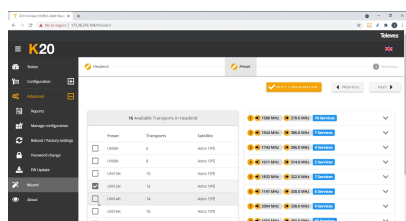
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- SID filtering allows the removal of undesired services inside a multiplex (enhanced occupation use)
- Compact design: 273x203x57 mm
- Zamak chassis provides high screening effect
- Great robustness

## Functionalities

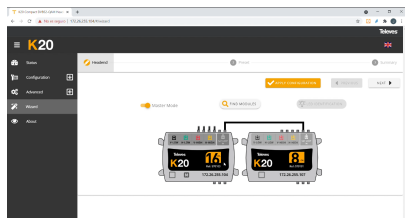
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### Using preloaded configurations



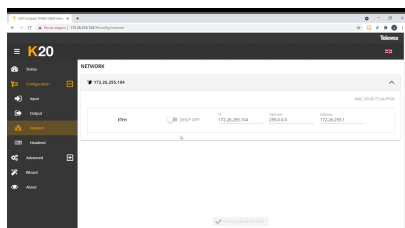
These headends incorporate default preloaded configurations in the system depending on the number of transponders in the module. Simply select the desired configuration for the installation and apply it.

### Wizard mode for guided configuration



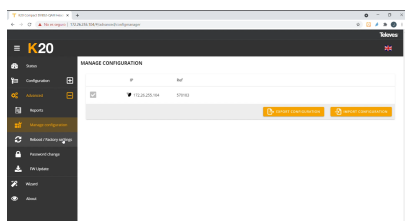
The interface includes a “Wizard” mode to configure a unit or the joint configuration of two loop mode units. It offers a guided step-by-step configuration to ensure successful configuration, with led indication of the unit, selection of the desired preload configuration, and a summary of the applied configuration.

## Ethernet network configuration



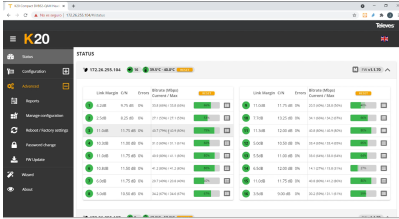
Each unit has two Ethernet RJ45 connectors, one for network connection and the other one for loop mode link between units. Thanks to the interface it is possible to configure input parameters of the network connection: IP address, subnet mask, and default port link, as well as the DHCP client mode.

## Cloning of headends configurations



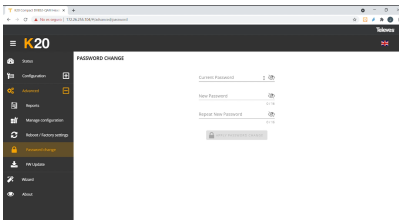
The web interface allows to export/import files for duplicating units configurations, to use them in another installations. This function helps to reduce time in typical installations, due of having previously a configured file. The exportation of these files also allows to have a headend configuration backup.

## Status system window



An analysis of the general information of the installation can be seen on the interface. The system indicators are identified with colors in order to facilitate the identification of errors in case of any incident.

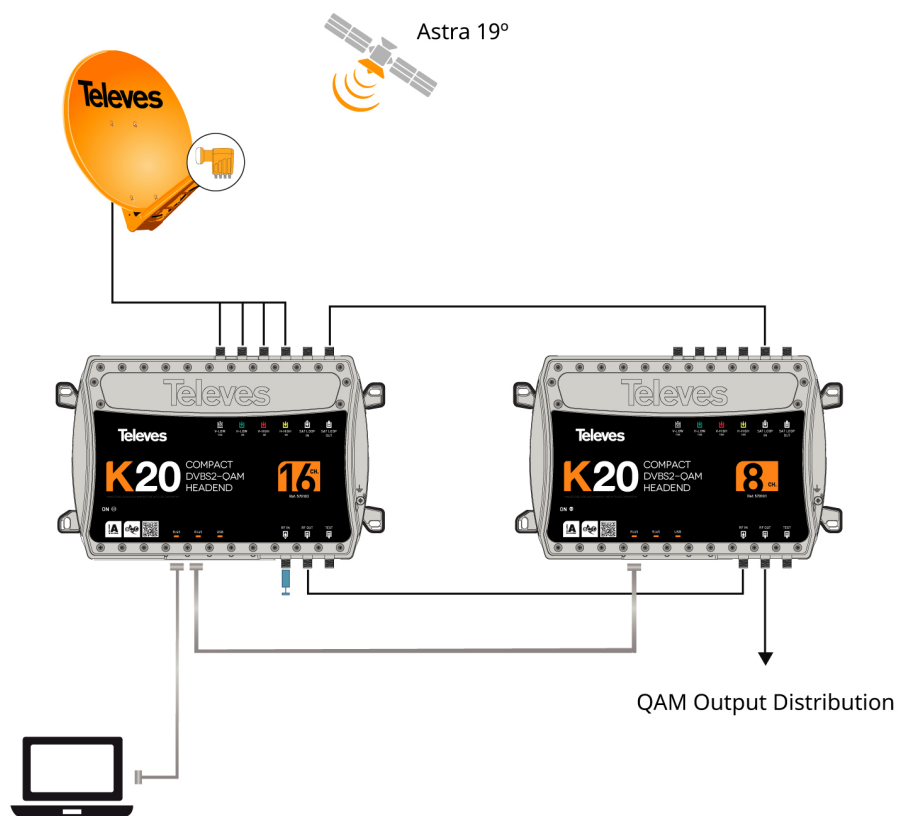
## Secure configuration with password

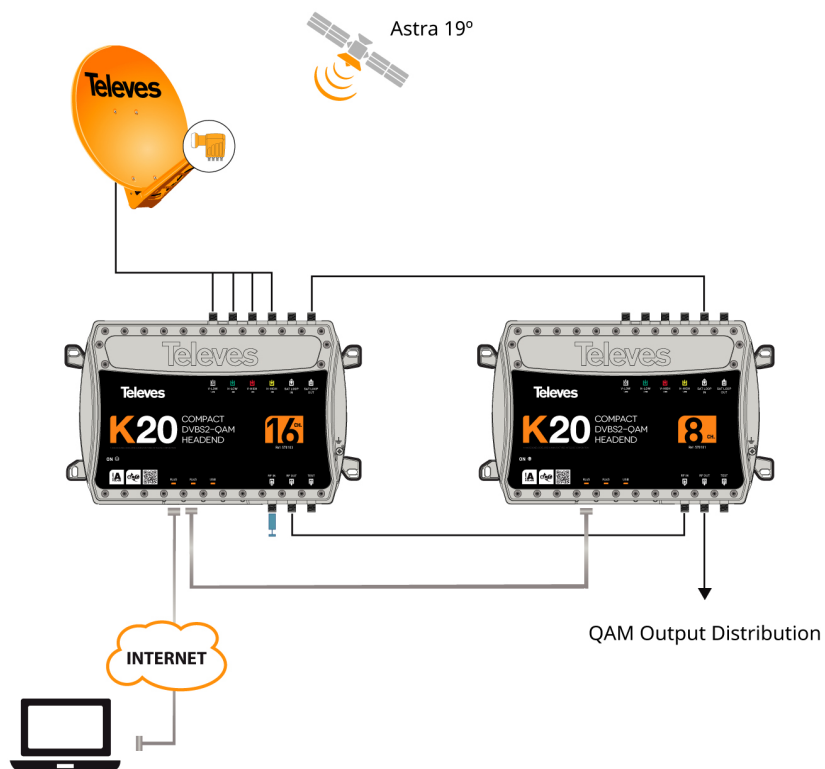
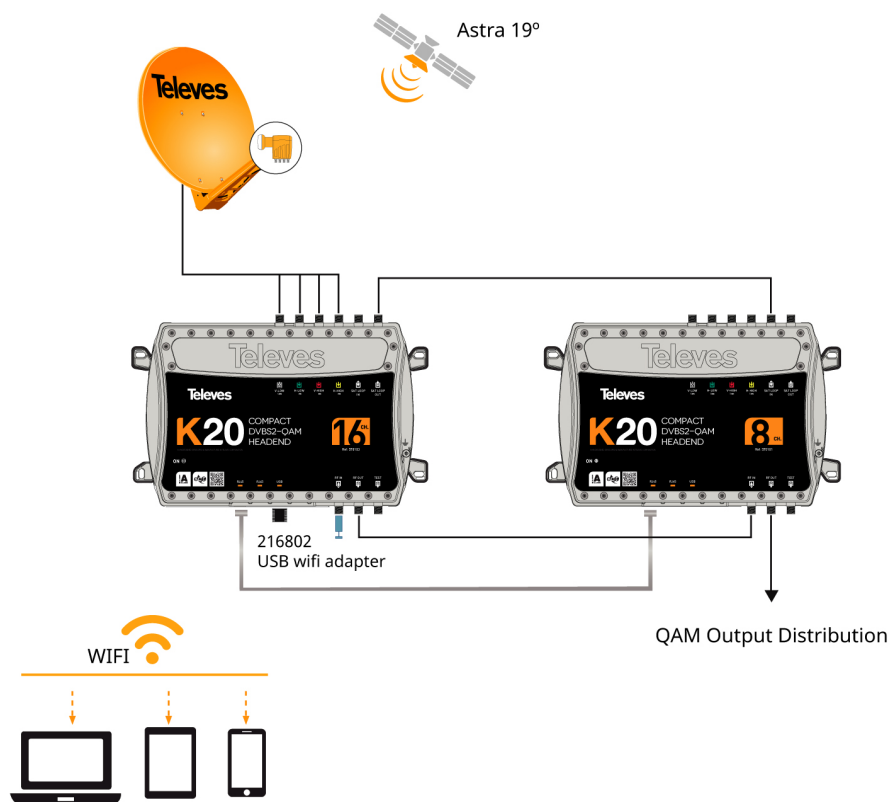


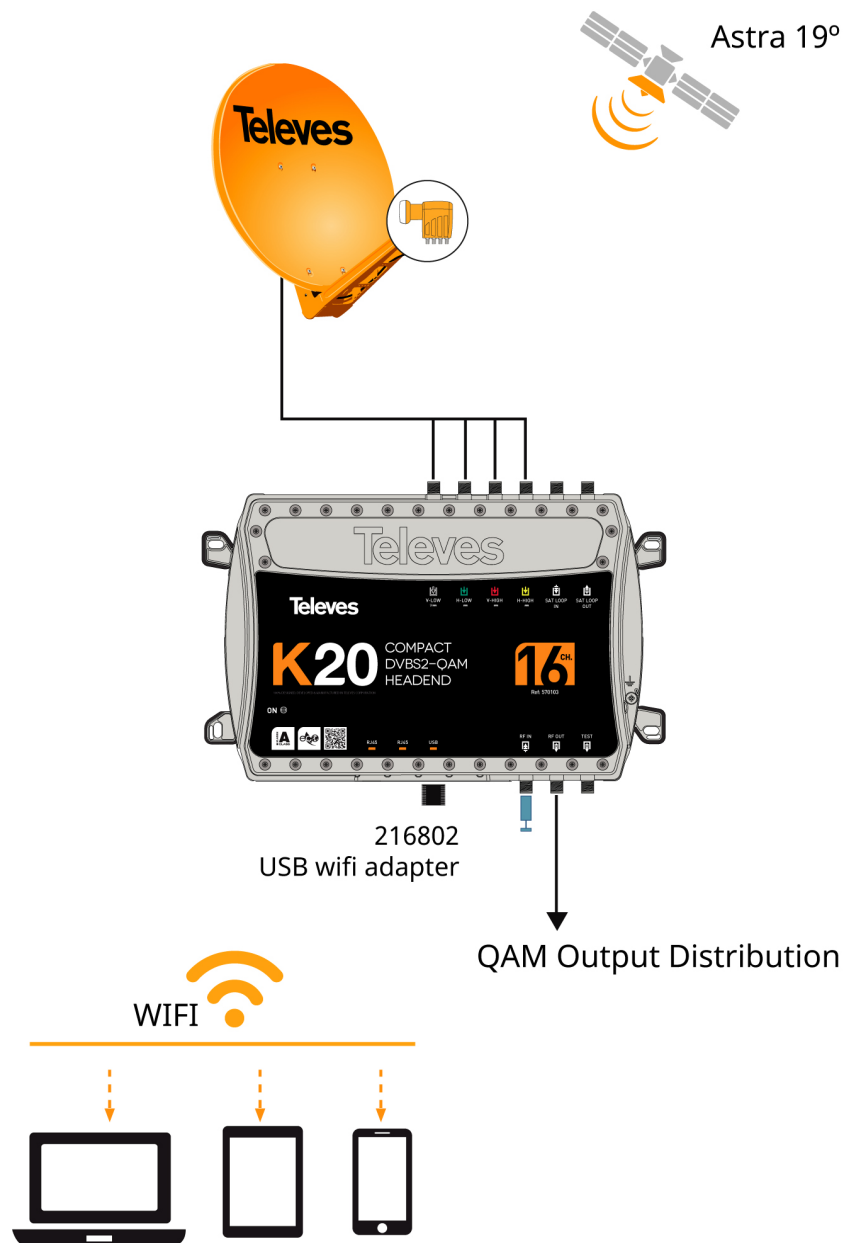
Protect the headend from unauthorized profiles by assigning a password to access the configuration edition. In addition, for those cases where there is more than one unit, both master and slave devices must have the same password.

## Application example

(Click to see the picture)







## Technical specifications

SAT input	Input frequency		MHz	950...2150
	Symbol rate		Mbaud	2 - 42.5 (DVB-S) 10 - 30 (DVB-S2/S2X)
	Frequency steps		MHz	1
	Input level		dBμV	49 - 84
	Input and output connectors			"F"-Female
	Input impedance		Ohm	75
	LNB powering		Vdc/KHz	13V/17V/ OFF - 22KHz (ON/OFF)
	Satellite selection (DiSEqC)			A, B, C, D
	Modulation	DVB-S2X		QPSK/8PSK, 8/16/32 APSK (EN302307-2)
		DVB-S2		QPSK, 8PSK (EN302307)
		DVB-S		QPSK (EN300421)
	Internal FEC			LDPC (9/10, 8/9, 5/6, 4/5, 3/5, 3/4, 2/5, 2/3, 1/3, 1/4, 1/2)
	External FEC			BCH (Bose-Chaudhuri-Hocquenghem)
Roll-Off factor		%	20, 25, 35	
QAM modulator	Modulation format			16, 32, 64, 128, 256 QAM
	Symbol rate		Mbaud	1 - 7.2
	Roll-Off factor		%	15
	Block code			Reed Solomon (188, 204)
	Scrambling			DVB ET300429
	Interleaving			DVB ET300429
	Bandwith		MHz	8.28 max.
	Output spectrum (select.)			Normal / Inverted
	RF Output	Output frequency (select.)		MHz
Frequency steps		KHz	250	
Maximum output level (select.)		dBμV	95±5	
Attenuation		dB	0 - 15 (global) 0 - 10 (per channel)	
Through losses		dB	< 1	
Input/output connectors			"F"-Female	
Output impedance		Ohm	75	
General		Power supply		V~ Hz
	Consumption		W / mA	570101 - 36 / 265 570102 - 62 / 470 570103 - 64 / 480
	Protection index			IP20