

TV OVER IP SERVICES

Flexible radio and TV solutions for businesses



With TV over IP, UPC Business is opening up new possibilities for hospitality businesses such as hotels, bars, hospitals and old people's homes to receive free-to-air radio and TV channels as well as pay TV channels as part of a customised channel package and to distribute these via their internal network. All channels are available from UPC Business for business customers via IP, with the channels being transmitted to the customer via optical fibre cable as IP multicast streams. The offer includes a broad, multilingual range of HD and SD TV signals. The channels are transmitted permanently, so that there is no delay when changing channels.

The highly available and stable fibre optic connection can be used for data and voice services at the same time.

TV over IP Services are available in two versions: as a TV Multicast Service and as a TV Broadcast Service.

TV Multicast Service

The TV Multicast Service distributes the radio and TV channels as IP multicast streams via the internal LAN infrastructure. This service is directly available at the service access point. The IP Multicast Stream can be used directly or as a feed for the customer's TV solution based on the existing coaxial network or an IPTV solution.

IPTV solution

IPTV solutions offer you the flexibility to integrate further services such as your own video channels or Video on Demand (VoD). With regard to the design of user interfaces, channel order etc., an IPTV solution can be customised. IPTV solutions are not offered directly by UPC Business. UPC Business works together with partners who implement IPTV solutions.

TV Broadcast Service

The TV Broadcast Service distributes radio and TV channels as digital DVB-C signals via the existing coaxial cabling. A Mini HeadEnd is installed on the customer's premises for this purpose. Radios and television sets are connected directly to the aerial sockets. The existing internal coaxial network does not need to be adjusted, but radios and televisions must be equipped with a DVB-C tuner. The frequencies can be assigned freely internally.

EPG

The Electronic Program Guide (EPG) will be provided for the TV Broadcast Service. For each channel, information supplied by the producers can be accessed.

Options

MySports

With the TV Multicast Service, like with the TV Broadcast Service, MySports can be received as a pay TV channel. MySports offers all National League games from the regular season through to the play-offs, with commentary in two or three languages – as well as many other sports broadcasts.

Pay TV channels

Pay TV channels will be transmitted to the customer if a valid contract exists between the customer and the pay TV channel. This contract is entered into directly between the customer and the pay TV channel. Transport will be provided by UPC Business.

TV Multicast Service

TV, radio signal	Format Transport Error rates Bandwidths Delivery	IP-Stream, UDP Multicast (IGMPv2) Single Program Transport Stream (SPTS) Error rates < 10 ⁻⁵ Per Standard Definition, SD TV channel: 3 to 8 Mbit/s Per High Definition, HD TV channel: 10 to 20 Mbit/s Layer 2 delivery of the IP stream based on IGMP joins. No Layer 3 multicast domain integration between the UPC network and the customer network
Radio and TV channels	25 channel groups per 1000 Mbit/s, see channel list (free choice of channel groups)	
Network access	Carrier Ethernet Service (based on a fibre optic connection)	
Network connection	Ethernet 1000 Mbit/s (RJ45)	
Service and support	Fault line Support times Service level	7 × 24: 365 days 5 × 11: Monday to Friday, from 7 am to 6 pm Bronze: 99.8% availability per year, max. 8 hrs downtime during the support time

TV Multicast Service Options

Mini HeadEnd*	For retransmission of the IP stream in the customer's own Layer 3 multicast network For retransmission of pay TV channels and MySports	
Service and support	Extended support times Extended service levels	6 × 16: Monday to Saturday, from 6 am to 10 pm 7 × 24: 24 hours / 365 days Silver: 99.9% availability per year, max. 6 hrs downtime during the support time

* Service and support: only Bronze

TV Broadcast Service

TV, radio signal	Modulation Frequency range Level Audio (dependent on channel) EPG Delivery	DVB-C 47–862 MHz 105...115 dBμV SD channel: MPEG Stereo HD channel: AC-3 Dolby Digital Electronic Program Guide Mini HeadEnd 16 QAM or 24 QAM
Radio and TV channels	24 channel groups per Mini HeadEnd, see channel list (free choice of channel groups)	
Mini HeadEnd	QAM module	16-QAM-, 256-QAM-modulation, channel spacing: 8 MHz 2 × 75 Ω RF Output, F Connector female
Network access	Carrier Ethernet Service (based on a fibre optic connection)	
Network connection	Ethernet 1000 Mbit/s (RJ45)	
Service and support	Fault line Supportzeit Service level	7 × 24: 365 days 5 × 11: Monday to Friday, from 7 am to 6 pm Bronze: 99.8% availability per year, max. 8 hrs downtime during the support time

TV Broadcast Service Options

Service and support	Extended support times	6 × 16: Monday to Saturday, 6 am to 10 pm 7 × 24: 365 days
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The details in this document do not constitute a binding offer. Subject to modification without notice.
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