

U 154

4-program IP / QAM converter



Professional IP signal-processing



The U 154 is used for the processing of 4 IP multicast groups out of one Gigabit Ethernet stream into 4 standard QAM channels. The QAM channels are modulated as 2 pairs of adjacent channels. The DirectDigital technology ensures high end signal parameters as a MER of typ. 45 dB and a shoulder attenuation of typ. 58 dB. To keep this signal quality after the combining, the U 114 can be equipped with optionally available output channel filters (U-KF..).

The configuration is done user-optimised with a webbrowser GUI. All relevant parameters can be set here.

U 154 IP / QAM извлекает из GigE до 4-х транспортных потоков (MPTS/SPTS) в 4 QAM-потока двумя независимыми парами смежных каналов (47-862 МГц). Используя технологию DirectDigital, удалось добиться высочайших выходных параметров MER (typ. 45 dB) и плечевого затухания (shoulder attenuation) (typ. 58 dB), Для сохранения параметров после суммирования предусмотрена возможность установки выходных канальных фильтров (U-KF..). Поддержка функции статического и динамического формирования NIT.

Type		U 154
Order number		380 154
Network interfaces (forwarded passively from the U 100 base unit)		
Management		2 x 100 Base-T Ethernet (RJ 45)
Data		2 x 1000 Base-T Ethernet (RJ 45)
Protocol		IEEE802.3 Ethernet, RTP, ARP, IPv4, TCP/UDP, HTTP, SNMP, IGMPv3
Transport stream processing		
TS decapsulation		UDP, UDP / RTP, 1-7 packets, FEC
TS processing		transparent (188 or 204 packets)
QAM-Modulator		
Modulation		16-, 32-, 64-, 128-, 256-QAM, digitally modulated
Signal processing		according DVB Standard
Spectrum shape	[%]	15 (cos-roll-off)
FEC		Reed-Solomon (204,188)-Code
Data rate adjustment		✓
PCR-Correction		✓
PID-Filtering / NIT-Handling		✓
Output symbol ratio	[Mbaud]	3,45 - 6,9
Bandwidth	[MHz]	4 - 8, depending on symbol ratio
Brutto data rate	[Mbits]	ca. 13,8 ... 55,2
RF output		
Connectors	[Ω]	75, 2 x F-female
Frequency range	[MHz]	47 - 862, digitally modulated
Output level	[dBμV]	80 ... 90
Shoulder attenuation	[dB]	typ. 58
MER (Equalizer, 64 QAM)	[dB]	typ. 45
Spurious frequency dist. 40 - 862 MHz	[dB]	> 60 discrete carriers / > 57 noise
Common datan		
Power consumption	[W]	30
Temperature range	[°C]	0... +45