

PolyMaster

Kopfstelle

- application recommendation: larger headend systems
- feeding of different signals in a common network
- individual systems
- wide module range



»the analogue and digital headend system«

PolyMaster – the modular headend system for high quality processing of SAT and terrestrial TV and radio programmes. The wide module range enables the building of individual, request specific systems.

Polytron PolyMaster is an on-site adjustable headend especially for larger headend applications e.g. in cable networks or for the independent support of whole housing estates.

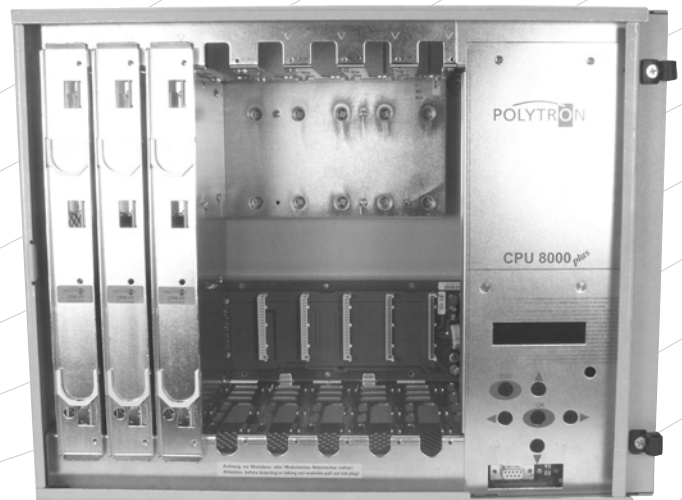


Due to the full range of modules, the PolyMaster headend is perfectly suited to the building of a customised system. Once programmed, each module works independently without a central programming unit. The homogenous technology of the modules guarantee an optimal signal quality and a clear assembly overview.

Base unit

The PolyMaster base unit can be equipped with up to 8 modules. Up to 6 input signals are distributed to the module slots. The central programming unit assigns an individual input to each slot. The LNB power supply 0/13/18V is separately adjustable for each of the inputs 1,3,5,6.

Several PoyMaster units can be connected by signal transit and enables an extension of the system up to 48 channels.



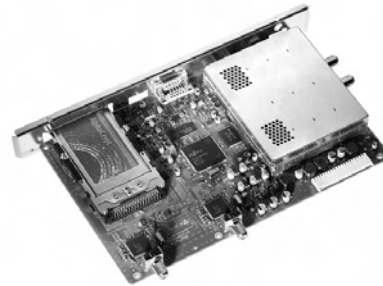
Type		CPU 8000 <i>plus</i>
Article no.		5520200
Frequency range	MHz	950 - 2400
Inputs / Outputs		6 / 16
Input level	dB μ V	60 ... 85
Isolation	dB	20
LNB-supply	V= A	0 / 13 / 18 4 x 0,5 (max. 1)
Frequency range	MHz	47-862
Amplification	dB	28,5
Return loos	dB	14
Variable attenuator	dB	0 - 20
Output level 60 dB CTB/CSO 16 channels	dB μ V	104
Transit loss	dB	4
Operating voltage	V~ Hz	200-250 50 - 60
Power consumption	W	160 with 16 analog channels
Connections		F-Connectoren
Dimensions (W x H x D)	mm	484 x 358 x 221
Ambiente temperature	°C	0 - 50
Weight	kg	9

- 8 module plug-in places
- switchable, intelligent input distribution filter, programmable via central operating unit
- LNB-supply, switchable
- micro-controlled operating unit
- integrated amplifier, 104 dB μ V
- passive transit output
- mounting of system on wall in 19" cabinet

Digital SAT-modules

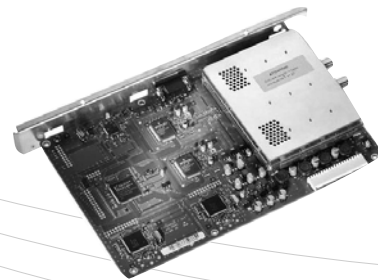
DVB-S/TV digital converter

- for processing of digital SAT-IF signals into analogue output signals
- adjacent channel operating
- twinmodules with 2 adjacent output channels
- CI-Version for 1 CA-module
- decoding of 2 programs out of one data stream
- all HF-connectors with F-sockets



DVB-S/QAM digital transcoder

- for processing of digital SAT-IF signals into digital output signals (QAM)
- CPM-DSQTN with NIT processing
- adjacent channel operating
- twinmodules with 2 adjacent output channels
- integrated Bit stuffing
- all HF-connectors with F-sockets



Type		CPM-DSST	CPM-DSSTI	CPM-DSMTI	CPM-DSQT	CPM-DSQTN
Article-No.		5521210	5521220	5521200	5521010	5521030
Input frequency	MHz	920-2150				
Interface		-	CI		-	
Input Signal	dB μ V	47-70				
Demodulation	dB μ V	QPSK				
Symbolrate QPSK	Ms/s	2 - 35 (optional)				
ZF-Band width, automatic	MHz	27/36				
Modulation	QAM	-			16-/32-/64-/128-/256	
Symbolrate QAM	Mbit	-			3,4 - 7,0	
Frequency	MHz	110 - 862				
TV-Standard		B/G		D/K, I, L	-	
Output	dB μ V	90				
Variable attenuator	dB	0 - 20 dB				
Power consumption	W	12	13		11	
Weight	kg	0,51	0,55	0,552	0,51	0,53

Digital terrestrial modules

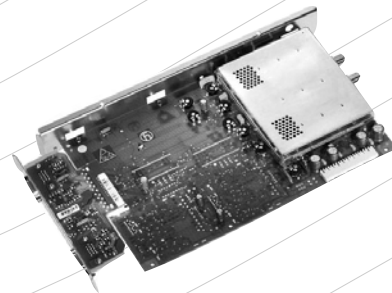
DVB-T/TV digital converter

- for converting of digital terrestrial signals into digital output signals
- adjacent channel operating
- twinmodules with 2 adjacent output channels
- with automatic gain control
- all HF-connectors with F-sockets



DVB-T/QAM digital transcoder

- for processing of digital terrestrial signals into digital output signals (QAM)
- adjacent channel operating
- twinmodules with 2 adjacent output channels
- integrated Bit stuffing
- all HF-connectors with F-sockets



Type		CPM-PTST	CPM-DTSTI	CPM-DTMTI	CPM-DTQT
Article No.		5523160	5521230	5523150	5521020
Input frequency range	MHz	45 - 862		164-230/470-862	
Input level	dB μ V	30 - 80			
Symbolrate	MS/s	2 - 35			
Modulation		COFDM 2 k, 8 k			16-/32-/64-/128-/256
FEC		according to DVB-regulations			
Viterbi code rate (auto.)		1/2, 2/3, 3/4, 5/6, 7/8, 8/9			
Bandwidth	MHz	7/8			
Output frequency	MHz	110 - 862			
TV-Standard		B/G (stereo)		PAL D/K, I, SECAM L	-
Output level	dB μ V	90			
Power consumption	W	13			11
Weight	kg	0,72	0,73	0,74	0,53

Analogue SAT-modules

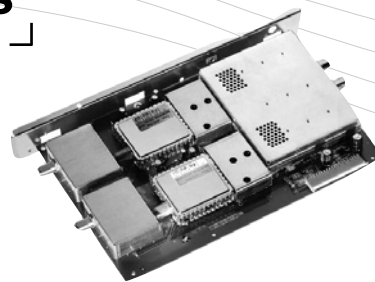


SAT/TV analogue converter

- for processing of analogue SAT-IF signals into analogue output signals
- adjacent channel operating
- twinmodules with 2 adjacent output channels
- integrated basis band interface with CPZ-D
- all HF-connectors with F-sockets

Type		CPM-SST Mono, Stereo, 2 Ton	CPM-SMT Mono
Article-No.		5520700	5520500
Frequency range	MHz	950-2150	
Input level	dB μ V	47-70	
IF-Bandwidth	MHz	27	
Videohub adjustable	MHz	16 / 22,5	
Video polarity		neg./pos.	
Audio frequency	MHz	5,5 - 9,5	
Frequency area	MHz	110 - 862	
TV-Standard		B / G	D / K, I, L
Output level	dB μ V	90	
Variable attenuator	dB	0 - 20	
Power Output	W	8	
Weight	kg	0,65	0,62

Analogue terrestrial modules



TV/TV analogue converter

- for converting of analogue terrestrial signals into analogue output signals
- adjacent channel operating
- twinmodules with 2 adjacent output channels
- with automatic gain control
- all HF-connectors with F-sockets

Type		CPM-TT	CPM-TTM
Article-No.		5521500	5521300
Input frequency range	MHz	45-862	
Input level	dB μ V	65-85	
Output frequency	MHz	110 - 862	
TV-Standard		B/G	Multinorm
Output level	dB μ V	90	
Variable attenuator	dB	0 - 20	
Weight	kg	0,6	0,63

FM modules

CPM-SUT

- for the processing of two individual sound sub-carriers (analogue Wegeners I or digital ADR) in FM-channels

CPM-FF

- for the conversion of 2 FM channels into 2 other FM channels
- adjacent channel operating



CPM-FV

- for amplification of the FM-range
- 6 adjustable notch filters for filtering out strong radio signals

CPM-DSUT

- for the conversion of 2 DVB-S-Radio channels into FM range

Type		CPM-SUT ADR/Panda to VHF	CPM-FF UKW-converter	CPM-FV UKW-amplifier	CPM-DSUT DVB-S/UKW
Article-No.		5521600	5521700	5521800	5521610
Input frequency range	MHz	950 - 2150	87,5 - 108		950 - 2150
AFC switchable	MHz	± 4	–	–	± 4 MHz
Input level	dB μ V	47-70	53 - 99	–	47-70
IF bandwidth	MHz	27	230	–	QPSK
Symbolrate	MS/s	Mono / Stereo / 2 Ton	–	–	2-35
Audio frequency	MHz	6 - 9	–	–	–
Gain	–dB	–	34	–	–
Noise figure	–dB	–	3	–	–
Attenuation filter	dB	–	–	14	–
Output frequency range	MHz	87,5 - 108			
Output level	dB μ V	91			
Variable attenuator	dB	0 -20			
Power consumption	W	8	1,9	1,5	10
Weight	kg	0,6	0,7	0,67	0,7

Audio/Video-TV modulators

- for processing of Audio/ Video signals into analogue output signals
- adjacent channel operating
- twinmodules with 2 adjacent output channels
- all HF-connectors with F-sockets



Type		CPM-MST Mono / Stereo / Dual	CPM-MMT Mono
Article no.		5522100	5522000
Video input		1 V _{pp} (± 1 dB) / 75 Ohm	
Video bandwidth		20 Hz - 5 MHz	
Audio input		500 mVms / 10 kOhm	
Audio bandwidth		40 Hz - 15 kHz	
Connections		15 pin SUB-D	
Frequency range	MHz	110 - 862	
TV standard		B/G	D/K, I, L
Output level	dB μ V	90	
Variable attenuator	dB	0 - 20	
Weight	kg	0,6	

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