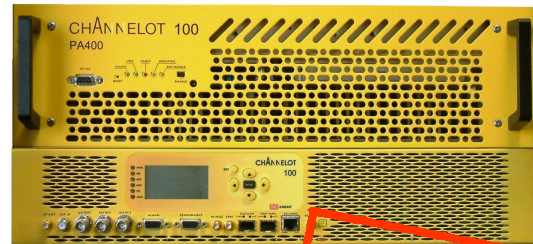


# Channelot 102-300



## 300W DVB-T2 Micro-Transmission Station

- Low cost, fully integrated 300W transmitter-site solution in 5U of rack space
- Adds an adaptively pre-corrected 300W high-power amplifier (HPA) to the Channelot 102 base unit
- Provides the same comprehensive functionality as the Channelot 102 transmission station
- Fully managed through a single, consistent interface



Now with adaptive HPA pre-correction

Channelot 102-300 is a 300 Watt output-power version of the Channelot 102 DVB-T2 Micro-Transmission Station. With a footprint of 5 RU of rack space, it increases Channelot 102 output power while providing the same functionality at unmatched integration level and cost-effectiveness.

### Function

The Channelot 102-300 DVB-T2 Micro-Transmission Station comprises the following modules:

- A Channelot 102 base unit, providing all the functionality of the base-line Channelot 102 product
- A Channelot 102 PA300 adaptively pre-corrected 300-Watt high-power amplifier (HPA)

### Features and Benefits

The Channelot 102-300 station provides the same comprehensive functionality as the Channelot 102 base configuration:

- Satellite receiver and various wired telecom interfaces for terminating the distribution network

- Professional GPS receiver for SFN network synchronization
- Transport stream demultiplexer for content grooming
- Full-featured DVB-T2 MFN and SFN modulator
- Carrier-grade remote management and control

To the above, Channelot 102-300 adds a compact and highly efficient HPA module to provide 300W of output power. The HPA is adaptively pre-corrected by the Channelot 102 base unit for superior signal integrity performance, and the complete transmission station fits within 5 Rack Units of 19" rack space.

Channelot 102-300 is fully manageable in a completely integrated manner: the operator is presented with a single, consistent and fully functional local and remote management interface, eliminating integration efforts and greatly streamlining operations.

Channelot 102-300 can be ordered in a redundant configuration that supports 1:1 hot redundancy of either the baseline Channelot 102 unit or the full transmitter.



## Specifications

### Satellite Receiver

IF frequency	950-2150 MHz
Signal format	DVB-S2, DVB-S
Bit rate	4 – 90 Mbps

### Telecom Interface

Protocol	DVB T2-MI over IP
Physical	100/1000 Ethernet over UTP 100/1000 Ethernet over fiber 1000 Ethernet over SDH Bridged Ethernet over E3/T3
FEC	Pro-MPEG CoP 3
Synchronization	IEEE 1588

### ASI Input Interface

Two ASI interfaces per EN 50083-9 Annex B, with auto-switchover

### GPS Receiver

Receiver	12 channels
Antenna power	5V, 30 mA DC

### Modulator

Format	DVB-T2 Single PLP, Multiple PLP SISO, MISO
FFT size	1K, 2K, 4K, 8K, 16K, 32K – normal and extended
Guard interval	1/128, 1/32, 1/16, 19/256, 1/8, 19/128, 1/4
Modulation	QPSK, 16QAM, 64QAM, 256QAM – normal and rotated
Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6 – short (16k) and normal (64k) blocks
Network sync.	MFN, SFN

### RF Output

Frequency range	470 – 862 MHz
Channel bandwidth	5, 6, 7, 8 MHz
Pre-correction	Linear Adaptive non-linear
Mask	-38 dB @ 4.2 MHz offset
MER	35 dB
Output power	300W

### Auxiliary Interfaces

Redundancy interface	Interconnecting two Channelot 102 stations for autonomous 1:1 hot redundancy
Logic inputs	For external alarm monitoring and reporting
Summary alarm	Dry contacts

### Management

Interface	100Base-T Ethernet or WAN
Protocol	Web (HTTP) and SNMP
Configuration	Manageable remotely; non-volatile memory-resident with back-up copy
Status	Readable remotely
Event notification	Web display and SNMP Traps
Software update	Remotely upgradeable in the field, with a built-in back-up copy

### Power

Supply rail	100 – 240V AC
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