



## Application

- DVB-T/-H/-T2 deployment
- Coverage enhancement
- Isolated villages in mountainous regions

## Key Features

- Up to 6 Channels in a single case
- 100 mW per channel
- HTTP, SNMP server
- Outdoor IP43, mast or wall mounting
- Filters and Combiner included

## Benefits

- No shelter needed
- Cost effective solution
- Fast and easy deployment

## Contact us

- [protel@protel.it](mailto:protel@protel.it)
- [www.protel.it](http://www.protel.it)

# Solution for Digital TV coverage

## Multi DVB-T/-H/-T2 & ISDB-T Gapfiller Nx100mW



**DVB-T<sup>®</sup> DVB-H<sup>®</sup> DVB-T2<sup>®</sup> ISDB-T**

### For a coverage from 4 000 m<sup>2</sup> up to 20 km<sup>2</sup>

A whole integrated solution : an unique receiving antenna access, 2 complete gapfiller modules with 100 mW amplifiers, channel filters, a combiner, an unique transmitting antenna access and a monitoring module with HTTP and SNMP server, in a single outdoor case.

A low installation cost: easy engineering rules thanks to the high sensitivity of the system allowing to re-broadcast a low level signal (up to -72dBm) and the high efficient echo-canceller system allowing an easy antennas installation.

A low ownership cost: any shelter is needed, only 4 m<sup>2</sup> floor with concrete slabs in case of mast-mounting, only a 4 m<sup>2</sup> wall in case of wall-mounting.

A connected solution: embedded WEB & SNMP server, friendly GUI, remote control through IP network or optional embedded GPRS modem. Network Management System is available.

A complete offer: turnkey sites kits, electrical cases, masts, cabin protection, etc... are available optional.



198 – Mutlichannel DVB-T/-H/-T2 & ISDB-T Gapfiller 100mW – ed3 – 10/2011

Quality Model FP1004D / ed 27 / 07 / 2011

DISTRIBUTORE PER L'ITALIA :

PROTEL S.a.s. – Via Magellano, 3 A/B int. 6 – 20090 Cesano Boscone (MI) Tel.: 02.4860.0265 - Fax: 02.4860.0871



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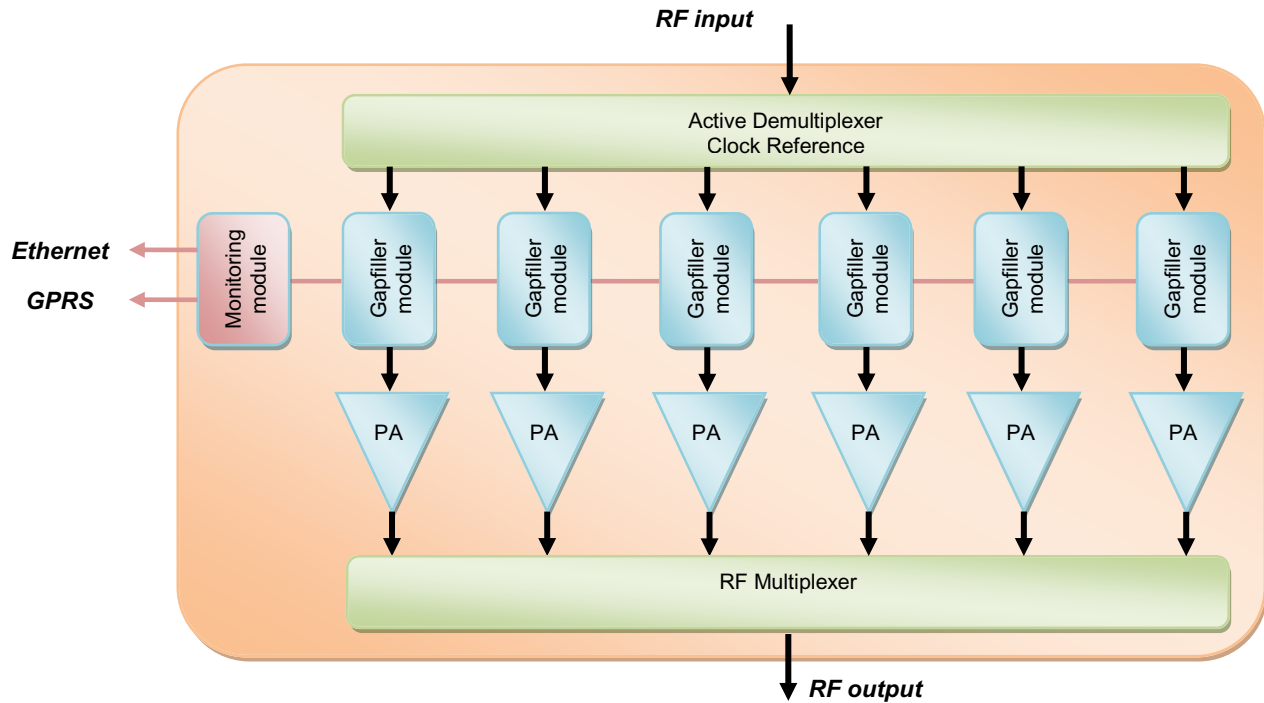
RF Features		
Standards	DVB-T, DVB-H, DVB-T2, ISDB-T	
Input / Output Frequency	470-862 MHz	
Bandwidth	8, 7 or 6 MHz	
Offset	-3, -2, -1, +1, +2, +3 x 1/6 MHz	
Return loss	-14 dB (1.33 : 1)	
Input level	-72 to -20 dBm	
Output level / channel	1 to 3 channels : 80 mW	4 to 6 channels : 50 mW
Out of band emission	Compliant with : ETSI EN 302 296 V1.1.1	
Shoulders	≥ 38dB (≥ 40dB typ.)	
MER	≥ 34dB (≥ 36dB typ.)	

Cabinet features		
Control and monitoring	WEB, SNMP Remote control by GPRS (optional) SELECOM Network Management Station (optional)	
Maintenance	All the modules are full band and can be easily replaced	
Dimensions	630 mm x 450 mm x 340 mm	
Weight	30 kg	
Fastening	On wall or on mast	
Protection against corrosion	Aluminum treated against the oxidation and painted	
Ingress Protection	IP43	
Cooling	Natural convection	
Power supply range	85-265 VAC	
Power consumption for each way	12 W	
Coaxial standard connectors	N female	
RF Combining	<u>1 to 3 channels :</u> Star-point combining filter	<u>4 to 6 channels :</u> 2 x Star-point combining filters + 3 dB coupler
Temperature	-30°C to +45°C	

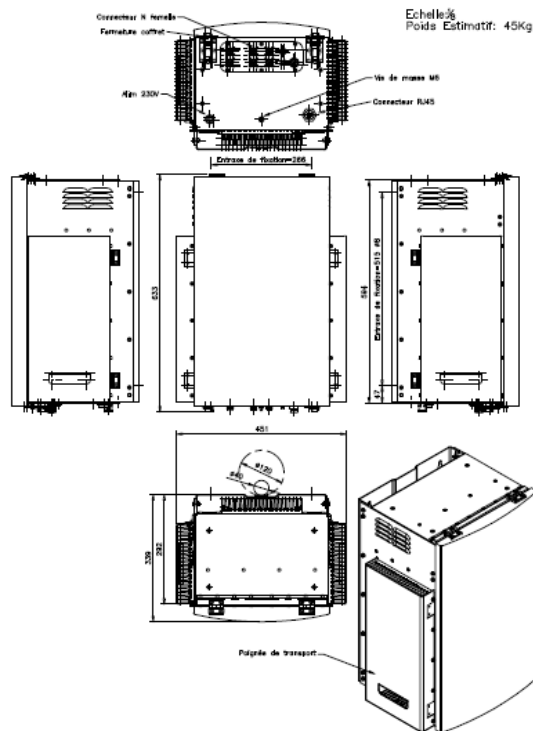
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### Synoptic



### Mounting Plan



Ordering Code	Designation
μGFxV	x = number of channels : 1, 2, 3, 4, 5 or 6
μGF-MTG	Monitoring Module by SMS
C-ELEC	Protective case includes a power differential protection, circuit breaker, power supply and surge protection.
C-ELEC+	Protective case with electrical isolation transformer, recloser, lightning Phoenix ...
FIXC-ELEC	Fixation kit for electrical box on mast
TOITC3V	Protection again sunlight and rain

### Other options

#### NMS (Network Management System)



- ✓ NMS software manages a complete network of different SELECOM equipment
- ✓ Screens with complete status and reports
- ✓ Location on a map of each equipment
- ✓ SMS, EMAIL alerts
- ✓ Equipment control in case of needing

#### Solar panels



- ✓ Free Energy
- ✓ Battery for autonomy in case of lack of sunlight
- ✓ Automatic relay to standard power supply
- ✓ Ecological solution

#### Turnkey sites kits



- ✓ Donor & Emission antennas
- ✓ Feeders
- ✓ Grounding kits
- ✓ Wood and metallic masts
- ✓ Lightning protection
- ✓ Electro-technical kits