



# UA100-R

## 35Wrms DVB-T Amplifier

UA100-R is a full LD-MOS Broadcast Power Amplifier designed for both digital and analog applications. The unit is the state of the art in terms of easy assembly, reliability and performances. The complete unit can assure the compliance to all relevant international standards.

- Full LD-MOS Power Amplifier
- 35Wrms Out DVB-T
- DTV (8 VSB): 50Wrms
- BroadBand (470-860 MHz)
- Designed for SKD sales
- Internal cabling free
- Easy maintenance without special tools
- RS232-RS485 interface
- Control software included
- Extremely strong mechanical structure



### Electrical Data

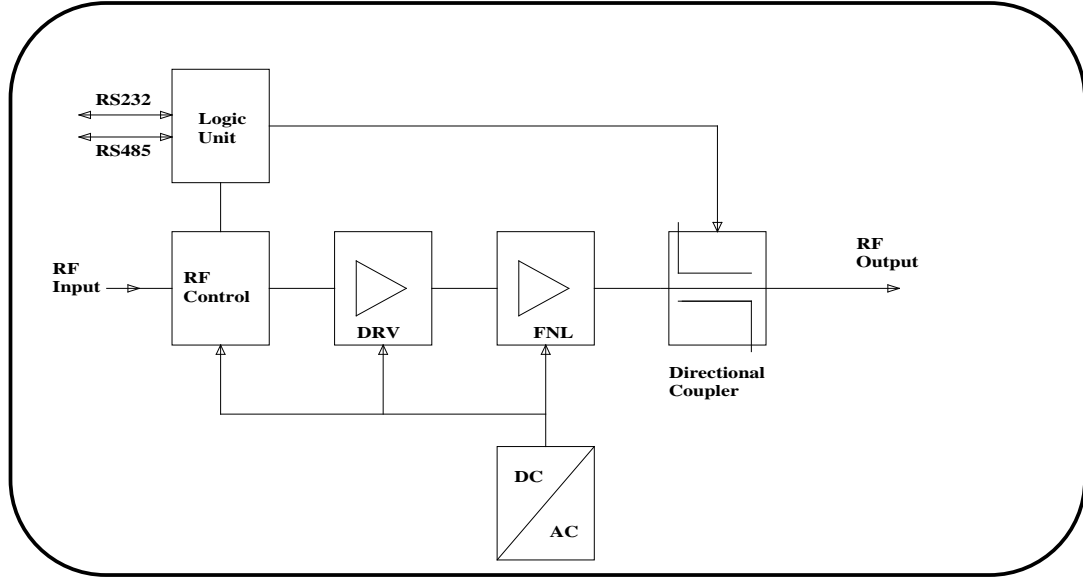
<b>Voltage Supply</b>	88 to 240Vac
<b>Power Consumption</b>	330W @35Wrms DVB-T @650MHz (typ.)
<b>Current Consumption</b>	1.5 A max @ 220 V digital application
<b>Operating Temperature</b>	0 to +45 °C
<b>Humidity</b>	Up to 90% (non condensing)
<b>Gain</b>	46dB nom. ±2dB (fine ADJ available)
<b>Gain Stability</b>	<a href="#">0 to 45 deg. +/-0.5dB[1]</a>
<b>Power Out (@1dB compression)</b>	Min. 80W (Typ. 100W)
<b>Input Return Loss</b>	Min. -16dB (Typ. -20dB)
<b>Output Return Loss</b>	Min. -16dB (Typ. -20dB)
<b>Load Mismatch (CW 30W F<sub>0</sub> 860MHz VSWR=2:1)</b>	No degradation
<b>P<sub>out</sub> DVB-T</b>	35Wrms shoulder < -36dBc (with precorrection)
<b>DTV (8 VSB)</b>	50Wrms
<b>P<sub>out</sub> PEP</b>	50W IMD < -27 dBc

### Mechanical data and Interfaces

<b>Dimensions</b>	<a href="#">19" 3HU std 400mm depth[2]</a>
<b>Weight</b>	12 Kg.
<b>RF in</b>	N connector rear panel
<b>RF out</b>	N connector rear panel
<b>RF mon</b>	SMA connector rear panel
<b>RS232</b>	D 9 poles front and rear panel
<b>RS485</b>	D 9 poles rear panel
<b>Local Enable</b>	Switch front panel Two-pole connector rear panel



# UA100-R



## Remote control

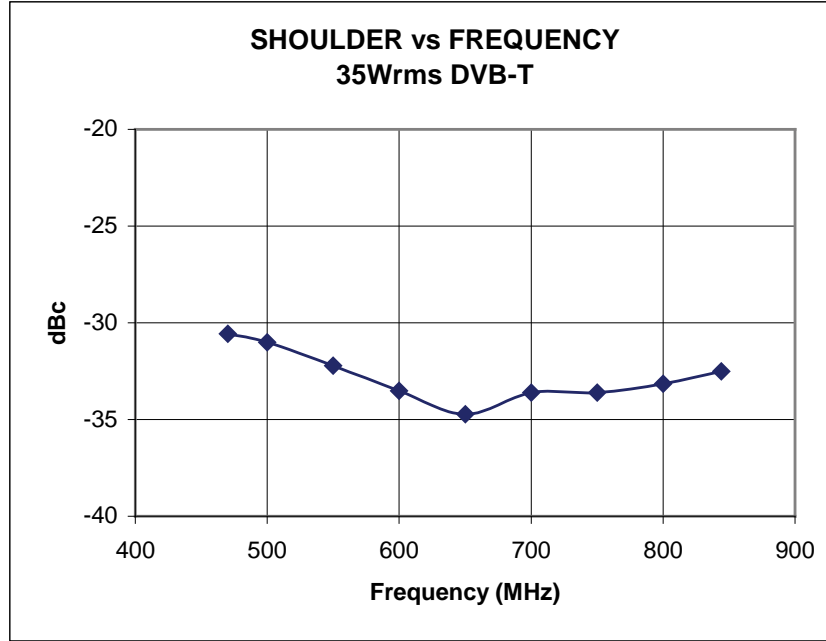
<a href="#">Enable[1]</a>	RF Enable ON/Stand By
<b>GAIN (option)</b>	Gain setting

Readable data by remote computer or Control Logic Unit (through RS232/RS485)

STATUS/ALARMS	NOTES
Enable	ON/STAND BY
RF Faults	ACTIVE if Gain < 6dB referred to nominal
°C max	ACTIVE when RF Thermal Protection is ON
Pin max	ACTIVE when RF Overdrive Protection is ON
VSWR max	ACTIVE if VSWR max Protection is ON
I max	ACTIVE when Current is too high
MEASUREMENTS	
RF in	Input Power in mWrms
RF out	Output Power in Wrms
RF DRV	RF Driver Output in Wrms
RF Heatsink Temperature	Temperature in °C
IDC Driver	Value in A
IDC Final Stage	Value in A
VDC	PS Output Voltage
Self Protections	
RF Thermal Protection	
Overdrive	Pin max must be set on the working channel with the used DVB-T signal
VSWR max	VSWR max must be set on the working channel with the used DVB-T signal
I max	



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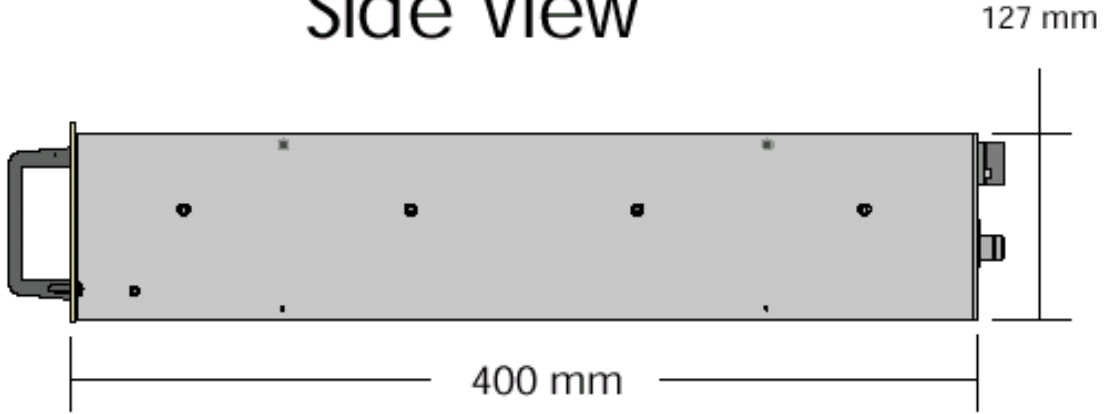
Without precorrection

**Note:** By the use of UBS DVB-T Modulator Mod. PT8750 + PT8731 option, and the proper precorrection, the UA100-R is able to deliver 35Wrms at better than  $-36\text{dBc}$  shoulders on all the band.



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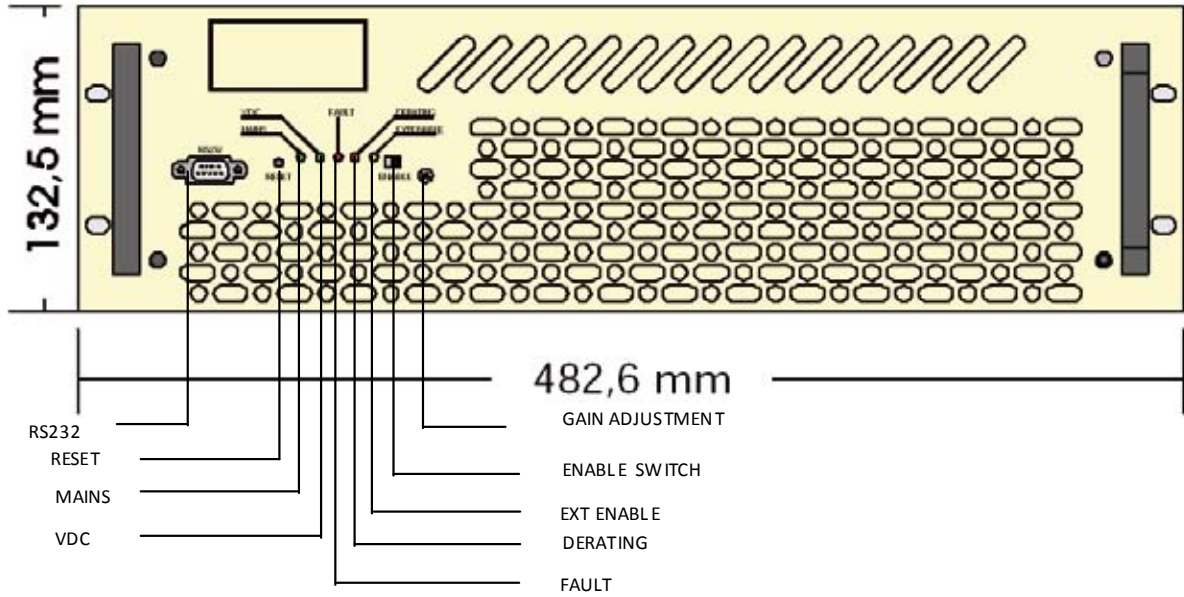
Side View



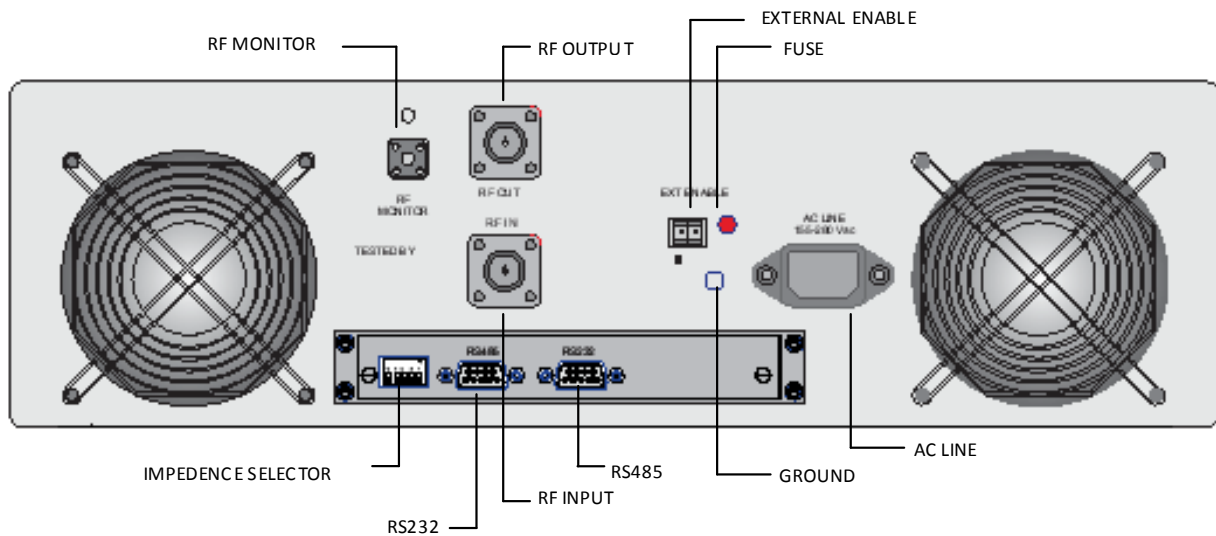
Top View



## Front Panel



## Rear Panel





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