

3 - 8 Wrms DVB-T UHF Amplifier

AU05-D is a full LD-MOS Broadcast Power Amplifier designed for digital signal repeaters and gap-fillers.. The unit is the state of the art in terms of easy assembly, reliability and performance. The complete unit can assure the compliance to all relevant international standards.

- Full LD-MOS Power Amplifier
- 3-8 Wrms Out DVB-T
- BroadBand (470-862 MHz)
- Internal cabling free
- Easy maintenance without special tools
- RS232-RS485 interface
- Measures and Thresholds auto-ranging at amplifier setting up
- Control software included
- Extremely strong mechanical structure



This picture is a mere example, it does not bind the provided product

Electrical Data

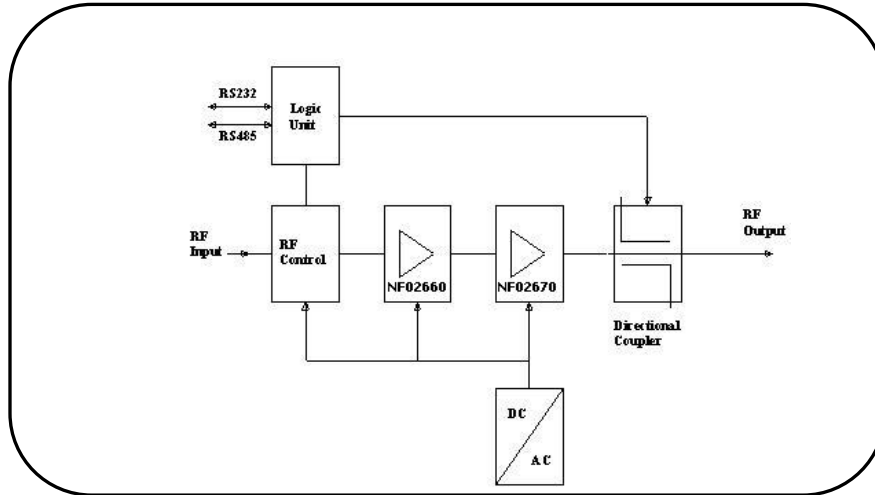
Voltage Supply	100 to 240Vac
Power Consumption	65W @ 5 Wrms DVB-T @650MHz (typ.)
Current Consumption	0.4 A max @ 220 V digital application
Operating Temperature	0 to +45 °C
Humidity	Up to 90% (non condensing)
Gain	40dB nom.
Power Out (@1dB compression)	Min. 45W (Typ. 55W)
Input Return Loss	Min. -16dB (Typ. -20dB)
Output Return Loss	Min. -18dB (Typ. -20dB)
Load Mismatch (CW 10W F ₀ 860MHz VSWR=2:1)	No degradation
P _{out} DVB-T	up to 5 Wrms shoulder < -36dBc (without precorrection) typ. 8 Wrms shoulder < -36dBc (with precorrection) typ.

Mechanical data and Interfaces

Dimensions	19" 1HU std 400mm depth
Weight	11.5 Kg.
RF in	SMA connector front panel
RF out	SMA connector front panel
RF mon	SMA connector front panel
RS232 or RS485	D 9 poles front panel
Local Enable	Switch front panel

Contact Res-Ingenium, +39 0763 316333 Fax +39 0763316002- or visit www.res-ingenium.com for a complete listing.

Block Diagram



Remote control

Enable	RF Enable ON/Stand By
GAIN (option)	Gain setting

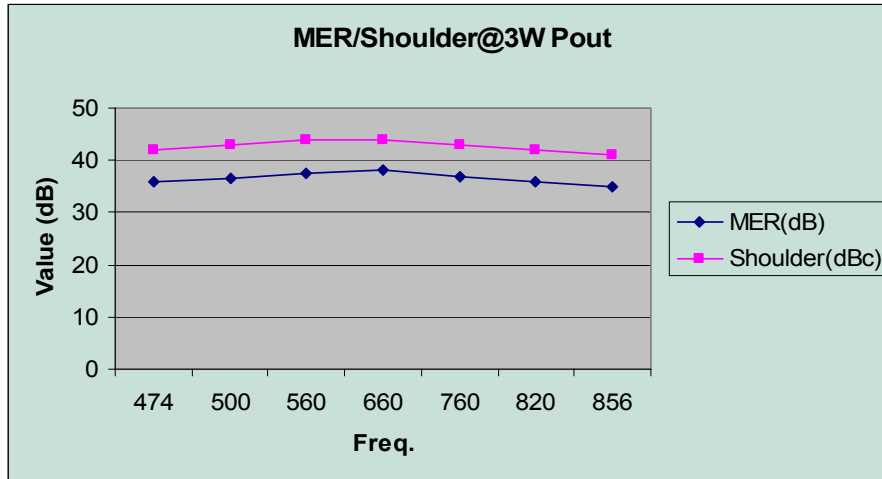
Readable data by remote computer or Control Logic Unit (through RS232/RS485)

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 uW (RMS for DVB-T)
RF out	Output Power in W (RMS for DVB-T)
RF REF	Reflected Power in W (RMS for DVB-T)
RF Heatsink Temperature	Temperature in °C
IDC RF Section	Value in A
VDC	PS Output Voltage

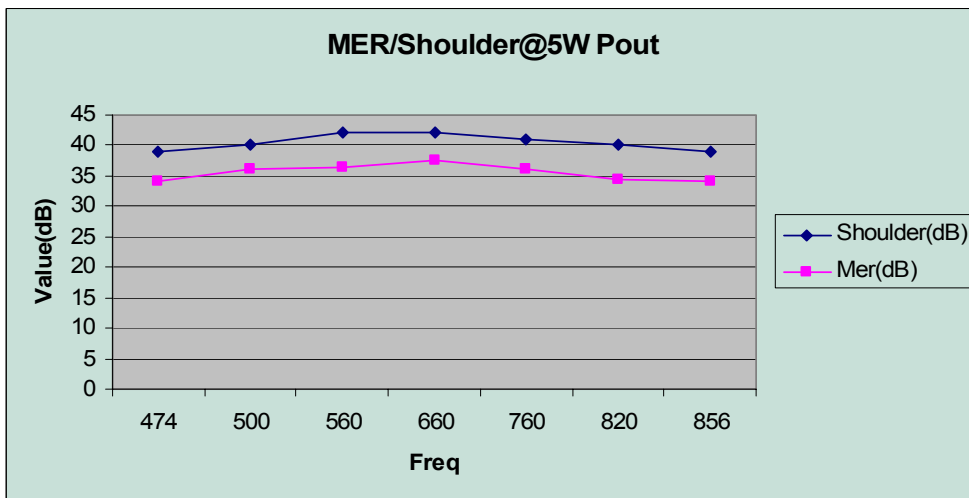
Self Protections

RF Thermal Protection	
Overdrive	Pin max must be set on the working channel with the used DVB-T
VSWR max	VSWR max must be set on the working channel with the used DVB-T
I max	

NOTE: all RF measures and protection thresholds automatically set up on the working frequency set by the user.

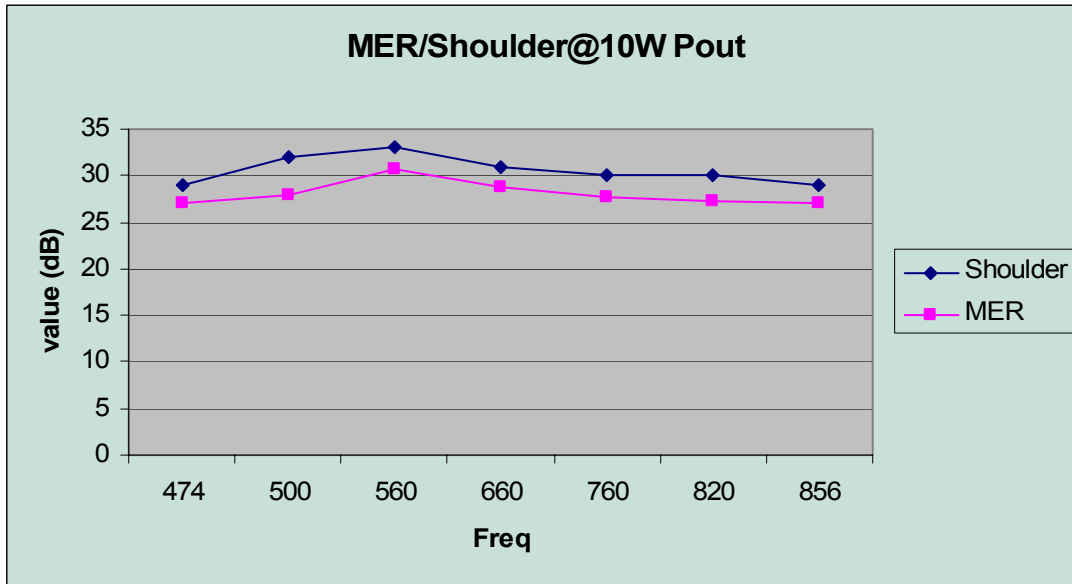


Without Precorrection



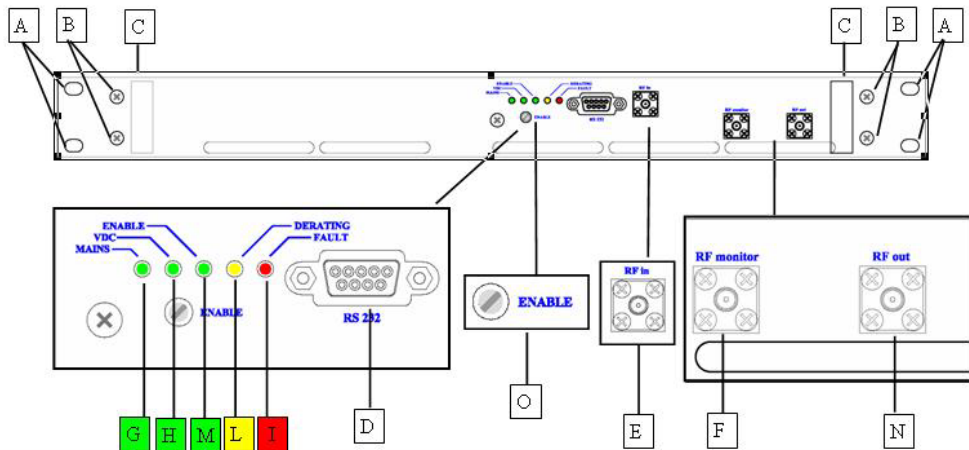
Without Precorrection

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Without precorrection

FRONT PANEL

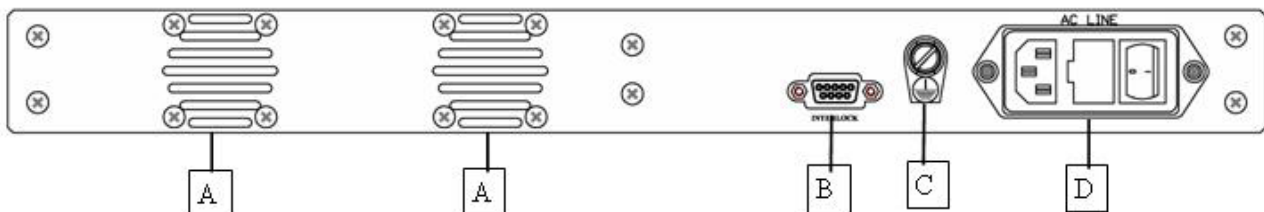


- A: Rack fixing
- B: Front Panel fixing Screws
- C: Handles
- D: RS232/RS485 Connector
- E: RF In
- F: RF Mon
- N: RF Out
- O: Hardware Enable Switch

LED INDICATORS

- G: Mains Led (ON with VAC Power Supply connected)
- H: Vdc Led (ON with Power Supply active)
- I: Fault Led (ON when amplifier gain is 6dB less than nominal. If led flashes, the amplifier is under protection condition)
- L: Derating Led (ON when temperature is too high and Output Power is automatically reduced)
- M: Hardware + Software Enable (Active when amplifier is ON)

REAR PANEL



- A: fan
- B: Interlock
- C: Ground
- D: AC Power Supply Input 100/240 Vac (standard)

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