

## 4 in 1 QAM Modulator WDQ-3244

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### Features

- ◇ 4 adjacent channel QAM carrier
- ◇ 4 ASI inputs, TS packet format input automatic detection (188 or 204 bytes)
- ◇ RF output power 90~100dBuV ( with 0~10dB adjustable attenuation range) and 48~863MHz frequency range
- ◇ 16~256QAM modulation modes
- ◇ Provide RF output monitoring port (-20dB)
- ◇ Adjustable Symbol Rate: 5 to 7Mbaud
- ◇ PSI/SI tables synchronization update
- ◇ Excellent RF output performance, MER≥40dB
- ◇ Memory protection for power-fail
- ◇ Local keyboard control and LCD display, or access via Ethernet link




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### Description

WDQ-3244 4 in 1 QAM is a new compact (1RU only) chassis and cost-effective QAM modulator, which is designed by Ningbo Youxin according to the DVB related standards. This device is integrated up to 4 channel QAM modulating carrier outputs, in which each carrier has independent signal channel encoding and direct RF output. Hence, one PCS 4 in 1 QAM modulator can work as 4 standalone QAM modulators, significantly reducing the network operators' head-end cost. WDQ-3244 has 4 ASI input, RF output and RF testing output. The WDQ-3244 has very convenient and friendly management interface, the user can complete all operation via local keyboard and LCD display on device, or access through the Ethernet port on device.

### Recommended Operating Conditions

Stress in excess of the maximum absolute ratings can cause permanent damage to the device (See Table 1)

Table 1 – Recommended Operating Conditions

Parameter	Symbol	Min.	Max.	Unit
Supply Voltage <small>Note</small>	V	90	250	V
Supply Frequency	F	49	51	Hz
power consumption	C		25	W
Ambient Operating Temperature	Tw	0	+50	° C
Storage Temperature	Ts	-25	+55	° C
Operating Humidity	H	10	75	%

Note: Support both 110V and 220V supply voltage standards, but please let us know which one do you need when you release order

### Specifications

Table 2 – Technical Specifications

Parameter	Symbol	Description	Unit	Remark
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WDQ-3244**

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<b>Mechanical dimension</b>				
Height	H	42	mm	About 1U
Width	W	434	mm	About 17"
Depth	D	340	mm	
<b>ASI Input</b>				
Number of ASI input	-	4		
Impedance	-	75	W	
Connector	-	BNC	NA	
TS packet format	-	188 or 204	Byte	Automatic detection
Transmission format	-	Data packet	NA	
<b>RF Output</b>				
Impedance	-	75	W	
Connector	-	BNC	NA	
Frequency	-	48~863	MHz	
Output level	-	90~100	dBuV	Adjustable attenuation of 0~10dB
<b>Modulation Specification</b>				
Modulation scheme	-	16/32/64/128/256QAM	NA	
Symbol Rate	SR	$5 \leq SR \leq 7$	Mbaud	
Bandwidth	BW	$\leq 8$	MHz	
Modulation Error Rate	MER	$\geq 40$	dB	After equalizer, 64QAM
Bit Error Rate	BER	$\leq 10E-9$		After FEC, 64QAM
Carrier to Noise	C/N	$\geq 45$	dB	
Carrier suppression	-	$\geq 58$	dB	
Phase noise	-	@10KHz $\leq -80$ dBc/Hz, @100KHz $\leq$ $-100$ dBc/Hz		

**Applications**

- ◇ DVB-C QAM modulation