

**Features**

- ◇DVB-S Standard for error correction encoding
- ◇Input 188 and 204 packet automatic identification
- ◇NIT mapping and sending, support 44 NIT mapping
- ◇PID filtering and re-mapping
- ◇PSI/SI information pick-up, parse and modification
- ◇SI information replacement and insert
- ◇Input data null packet filtering and output data filling.
- ◇PCR correction function
- ◇Show and inspect system input bit rate and valid bit rate real time
- ◇Provides -20dB RF test port
- ◇Enables centralized network management, remote upgrades and maintenance
- ◇With a power-down memory function



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**Description**

WDQ-3180 QPSK Digital modulator converts input data streams into frequency signals; it meets to DVB-S standard. Signals from MPEG-II compact encoder or multiplexer was sent into QPSK modulator. It is according to DVB standard such as interlacing, RS error correction encoding, etc. After up-converting into the range of TV channels, signals can be transmitted through HFC and MMDS networks. It's widely used in digital TV, data broadcasting, VOD, Internet, video conference etc. The WDQ-3180 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
<b>Mechanical dimension</b>				



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WDQ-3180**

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Height	H	42	mm	About 1U
Width	W	434	mm	About 17"
Depth	D	340	mm	
<b>ASI Input</b>				
Number of ASI input	-	1	NA	
Impedance	-	75	W	
Connector	-	BNC	NA	
Access data rate	-	270	Mbps	
Max valid bit rate	-	60	Mbps	
TS packet format	-	188 or 204	Byte	Automatic detection
Transmission format	-	Data packet or data burst	NA	
<b>SPI Input</b>				
Number of SPI input	-	1	NA	
Connector	-	DB-25 female	NA	
Packet format	-	188 or 204	Byte	
DVB Standard	-	LVDS	NA	
<b>RF Output</b>				
Number of RF output	-	1		
Impedance	-	75	W	
Connector	-	BNC	NA	
Output Frequency	-	250~500; 450~950; 950~2150	MHz	Supplied by different unit
Reflect loss	-	≥15	dB	
Output level	-	95~110	dBuV	adjustable
Carrier rejection	-	> 55	dB	
SNR	-	≥45	dB	out of band
<b>RF Test Output</b>				
Impedance	-	75	W	
Connector	-	BNC	NA	
<b>Modulation Specification</b>				
Constellation	-	QPSK	NA	
Symbol Rate	SR	1~45	Mbaud	
Channel Bandwidth	BW	1.25~56.25	MHz	
Effective output bit rate		≤60	Mbps	
Channel encoding	-	RS encode, DVB-S standard	NA	
MER	-	≥40	dB	
BER	-	≥9x10E-9		
SNR	-	≥45	dB	out of band
<b>Others</b>				



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Weight	M	6	Kg	
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**Applications**

- ◇ Re-multiplex for all DVB program Transport Stream related application
- ◇ DVB-S modulation