



## VTB-FWC/VTB-FWD

45W



### FEATURES

- Variety of Models
- Chassis mount type
- Compact and High Efficiency
- Dual Output
- **Isolated Power Supply**

MODEL/CHANNEL		Unit	VTB21-FWC/D		VTB21B-FWC/D		VTB22-FWC/D		VTB22B-FWC/D		VTB23-FWC/D		VTB24-FWC/D		VTB24B-FWC/D	
<b>OUTPUT (Double)</b>	Output Current	Vdc	5	24	24	5	12	12	12	12	15	15	5	12	12	5
	Output Current <b>45W (12V)</b>	A	0.5	0.75	1.5	1.4	2	1.5	3	0.6	1.5	1.3	5	1.5	3	1.4
	Output Current <b>25W (24, 48V)</b>	A	0.5	0.85	1.5	1.5	2	1.7	3	0.8	1.7	1.3	5	1.7	3	1.5
	Output Current <b>30W (24, 48V)</b>	A	-	1	1.8	-	-	2	3.3	-	-	1.7	-	2	3.5	-
	Output Current <b>45W (110V)</b>	A	0.5	0.85	1.5	1.5	2	1.7	3	0.8	1.7	1.3	5	1.7	3	1.5
	Output Current <b>50W (110V)</b>	A	5	1	1.8	1.5	2	2	3.3	0.8	1.7	1.7	5	2	3.5	1.5
	Line Regulation	mV	35	168	168	35	84	84	84	84	105	105	84	35	84	35
	Load Regulation	mVp	50	240	240	50	120	120	120	120	150	150	50	120	120	50
	Ripple and Noise	mVp	100	290	290	100	170	170	170	170	200	200	100	170	170	100
	Drift	mV	40	135	135	40	75	75	75	75	90	90	40	75	75	40
	Dynamic Load Regulation	mV	150	720	720	150	360	360	360	360	450	450	150	360	360	150
	Voltage Adjustment Range	-	+/-5% of Rated Output Voltage(at no load within input range)													
	Rise Time	-	200mS(maximum) at 25°C and rated input/output													
	Temp. Coefficient	°C	0.03%/°C													
Recovery Time	mS	0.5mS(typical)														
MODEL/CHANNEL		Unit	VTB21-FWC12		VTB21B-FWC12		VTB22-FWC12		VTB22B-FWC12		VTB23-FWC12		VTB24-FWC12		VTB24B-FWC12	
<b>INPUT</b>	Input Voltage <b>12V</b>	Vdc	DC 12V													
	Input Voltage Range	Vdc	DC 9.2V-16V													
	Efficiency	%	78		84		82		81		83		73		81	





## VTB-FWC/VTB-FWD

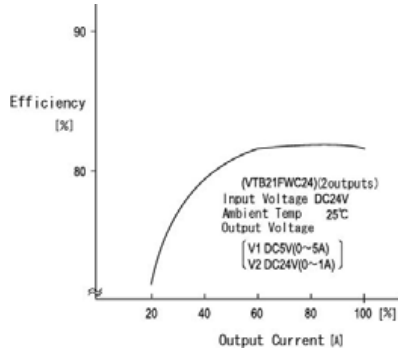
45W

MODEL/CHANNEL		Unit	VTB21-FWC24	VTB21B-FWC24	VTB22-FWC24	VTB22B-FWC24	VTB23-FWC24	VTB24-FWC24	VTB24B-FWC24
	Input Voltage 24V	Vdc	DC 24V						
	Input Voltage Range	Vdc	DC 19-32V						
	Efficiency	%	79	83	83	83	84	79	79
MODEL/CHANNEL		Unit	VTB21-FWC48	VTB21B-FWC48	VTB22-FWC48	VTB22B-FWC48	VTB23-FWC48	VTB24-FWC48	VTB24B-FWC48
	Input Voltage 48V	Vdc	DC 48V						
	Input Voltage Range	Vdc	DC 38-63V						
	Efficiency	%	76	83	81	81	83	79	80
MODEL/CHANNEL		Unit	VTB21-FWD	VTB21B-FWD	VTB22-FWD	VTB22B-FWD	VTB23-FWD	VTB24-FWD	VTB48-FWD
	Input Voltage 110V	Vdc	DC 110V						
	Input Voltage Range	Vdc	DC 85-140V						
	Input Current	A	20A(maximum)						
	Efficiency	%	76	83	81	81	83	79	80
MODEL/CHANNEL		Unit							
<b>Environment</b>	Operating Temperature	°C	0 to +50°C						
	Operating Humidity	%	85%RH(non-condensing)						
	Storage Temperature	°C	-20 to +85						
	Withstand Voltage	%	Primary-Secondary AC1,500V for 1minute (Vin=110 2000) Primary-Frame Ground AC1,500V for 1minute (Vin=110 2000) Secondary-Frame Ground AC500V for 1minute						
	Isolation Resistance	-	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester						
	Shock	-	294m/s <sup>2</sup>						
	Cooling	-	Convection						
	Vibration	-	5-10Hz: 10mm double amplitude, 10-55Hz: 19.6m/s <sup>2</sup> , 20 minutes period for 60 minutes each along X, Y, Z axes(non=operating)						
	MTBF	H	500,000						
Switching Frequency	-	40 Fix							
<b>Protection</b>	Over Current Protection	A	Current Limiting with automatic recovery						
	Over Voltage Protection	-	zener diode clamping						
	Reverse Voltage Protection	-	by internal fuse (Vin=110 by internal bridge diode)						
<b>Dimension</b>	Size(WxHxD) / Weight	mm/g	96Wx160Lx25H/480g						





## Efficiency Curve



## OCP Curve

