

ARTronic® UPS

On Line Uninterruptible Power Supply

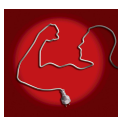
ARTon Titanium RM Series

19" Rack Mount 1-2-3-6-10 kVA

N+1 Parallel Redundant Operation up to 3 UPS for 6 and 10 kVA



- VFI Topology Class 1, Double Conversion UPS
- DSP Controlled Maximum Reliability
- Wide Input Voltage Range (110~300 VAC for 1-2-3 kVA, 176~276 VAC for 6-10 kVA)
- Green Energy with Input Power Factor Correction (PFC)
- Parallel Redundant Operation (n+1) up to 3 UPS for 6 & 10 kVA
- Graphic LCD Display and Touchpad Control Keys
- Automatic Restart & Cold Start Function
- Network Supported Monitoring & Control Software
- SNMP & AS400 Network Monitoring Options
- Silent & Economic Operation with Variable Fan Speed
- External Maintenance Bypass Switch for 6-10 kVA (Optional)



Our work is power !



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ARTon Titanium RM Series 19" Rack Mount 1-2-3-6-10 kVA Technical Specifications

MODEL	ARTon Titanium 1 RM	ARTon Titanium 2 RM	ARTon Titanium 3 RM	ARTon Titanium 6 /10 RM	
Power (VA / Watt)	1000 VA / 700 W	2000 VA / 1400 W	3000 VA / 2100 W	6 kVA / 4200 W	10 kVA / 7000 W
3 in Parallel, n+1 (VA / Watt)	-	-	-	18 kVA / 12.6 kW	30 kVA / 21 kW
Input - Rectifier					
Voltage & Voltage Tolerance	220 VAC, 1 Phase + Neutral, 110 ~ 300 VAC			220 VAC, 1 Phase + N, 176 ~ 276 VAC	
Voltage Tolerance Upon Load %	Transfer to battery at 110 VAC for 0-60%, 120 VAC for 61-70%, 140 VAC for 71-80 VAC, 160 VAC for 81-100% Load Transfer to battery at 300 VAC for 0-100% load, transfer back to the mains at 285 VAC, (Tolerance \pm 5V)			176~276 VAC at 0-100% Load	
Power Factor	≥ 0.97			≥ 0.98	
Maximum Current	5 Amper	10 Amper	15 Amper	30 Amper	45 Amper
Frequency & Frequency Tolerance	50 Hz & 46~54 Hz, Adjustable Range is 40~60 Hz by User			50 Hz & 46~54 Hz	
Output - Inverter					
Power Factor Range	0.65 ~1			0.65 ~ 1	
Voltage & Voltage Tolerance	208 / 220 / 230 / 240 VAC \pm 1%			208 / 220 / 230 / 240 VAC \pm 1%	
Dynamic Response (Max. Deviation)	Maximum Deviation \leq 5% at 0-100-0% Load Change			\leq 5% at 50-100-50% Load Change	
Recovery Time	Recovery time is 150 mili seconds for dynamic load change to be in \pm 2%			Recovery time is 60 milliseconds	
Frequency & Frequency Tolerance	50 Hz, \pm 0.2 Hz for battery operation			50 Hz, \pm 0.2 Hz for battery operation	
Output Waveform	Sinusoidal			Sinusoidal	
Total Harmonic Distorsion (V _{THD})	\leq 3% at linear load		\leq 4 % at linear load	\leq 2% at linear, \leq 6% at non-linear	
Crest Factor	3:1			3:1	
Overload Capacity	30 seconds for 110~150%, 300 milliseconds for > 150% over load			10 min for 105~130%, >130% to byp.	
Short Circuit Protection	Electronic short circuit protection			Electronic short circuit protection	
Bypass Type & Transfer Time	Static bypass, zero for line mode to battery, 2.5 milliseconds for battery to line mode			Static Bypass, Zero time	
Bypass Voltage Tolerance	80~286 VAC for 1-2-3 kVA and 176~261 VAC for 6-10 kVA adjustable, bypass can be disabled or enabled to use in standby mode				
Battery					
Type & Placement	Maintenance free type, internal for 1 kVA and external cubicle for 2-3-6-10 kVA				
Capacity & Quantity	12 V 7Ah x 3 pcs	12 V 7Ah x 8 pcs	12 V 7Ah x 8 pcs	12V 7Ah x 20 pcs	12V 9Ah x 20 pcs
Back Up Time - (100% PC Load)	6 minutes	10 minutes	5 minutes	9 minutes	5 minutes
Float Charge Voltage	41.1 \pm 0.6 VDC	110 \pm 0.4 VDC		274 \pm 0.5 VDC	
End of Discharge Voltage	30.6 VDC	81.6 VDC		204 VDC	
Charge Current & Charge Time	1 Amper, 5 hours charge time to 90 % capacity after discharge			2 Amper, 5 hours charge time to 90 %	
Indicators & Front Panel					
Type	Graphic LCD panel				
Control Panel	Touchpad buttons (On/Off, Audible Alarm Disable, Up/Down, Enter)				
Measurements and Warnings	UPS Status, Input/Output Voltage & Frequency, Load %, Load VA or W, Battery Capacity & Voltage, Warnings & Alarm Messages				
Indicators	Graphic Mimic Diagram for Energy Flow, Measurements, Warnings, Faults, Adjustments				
Protections					
Over Load	Electronic protection, load transfer to bypass without any break after over load period				
Short Circuit	Electronic protection, automatic inverter shutdown				
Over Temperature	Load transfer to bypass for 90°C internal temperature, transfer back to inverter when internal temperature < 80°C				
Modem / Network Protection	Surge protection for modem/network line for 1-2-3 kVA				
Audible Signal					
Warning Type & Warnings	Buzzer, can be disabled with audible alarm disable key Different audible alarm signals for battery operation, battery low voltage, UPS fault, over load etc.				
Communication					
Interface & Protocol	Smart RS232 communication with DB9 Port, DB25 port for paralleling (only 6-10 kVA), optional SNMP or AS 400 support				
Monitoring Software	Network supported free of charge monitoring & control software, supports Windows Family, Linux, Sun Solaris 7/8/9, IBM Aix 4.3 & 5.1x, HP UX 11.x, Compaq True 64, SGI Irix, Free BSD, Unix Systems, MAC				
General					
Efficiency (AC to AC at 100% load)	85 %	85 %	88 %	> 88 %	
Noise Level	< 45 dBA	< 50 dBA		< 55 dBA	
Electro Magnetic Compatibility	EN 50091-2 Class B, EN 50091-1, EN 61000-2-3, EN 61000-3-2, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5 for 1-2-3 kVA EN 62040-2 (EMI), EN 61000-4-2 (ESD), EN 61000-4-3 (RS), EN 61000-4-4 (EFT), EN 61000-4-5 (Surge) for 6-10 kVA				
Operating Temperature & Humidity	0°C ~ 40°C, Maximum 20 ~ 90 % (Non Condensed)				
Storage Temperature	-10°C ~ 70°C				
Protection Class	IP 20				
Cooling Type	Forced ventilation with variable speed cooling fans				
Operating Altitude	< 1000 meters (from Sea Level)				
UPS Dimensions (mm) - WxHxD	483 x 88 (2U) x 450	483 x 88 (2U) x 450	483 x 88 (2U) x 450	483x132 (3U)x600	483x176 (4U)x600
Battery Bank Dim. (mm) - WxHxD	-	483 x 88 (2U) x 450	483 x 88 (2U) x 450	483 x 132 (3U) x 600	
Weight (kg) - UPS+Battery Bank	15.3	10.3 + 25.3 (Total 35.6)	11.2 + 25.3 (Total 36.5)	18.3 + 58.2	18.8 + 65.2

*Product specifications are subject to change without further notice to third parties. © 2008 ARTronic Elektronik San. Müm. Tic. Ltd. Şti

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