

#### **Smart-UPS VT** APC Smart-UPS VT 20kVA 208V w/4 Batt. Modules, Start-Up 5X8, Internal Maintenance Bypass



APC Smart-UPS VT, 16 kW / 20 kVA,Input 208V 3PH / Output 120V, 208V, 208V 3PH, Interface Port DB-9 RS-232, Smart-Slot

**Includes**: Battery modules ship installed, Bolt down brackets, CD with software, Installation guide, Power modules ship installed, Smart UPS signalling RS-232 cable, Start up included, User Manual, Web/SNMP Management Card

#### **Smart-UPS VT Features & Benefits**

Availability	
Dual mains input	Increases availability by allowing the UPS to be connected to two separate power sources.
Scalable runtime	Allows additional run time to be quickly added as needed.
Hot-swappable	Ensures clean, uninterrupted power to protected equipment while batteries
batteries	are being replaced
-	Ensures clean, uninterrupted power to protected equipment when generator power is used.
Automatic internal bypass	Supplies utility power to the connected loads in the event of a UPS overload condition or fault.
Battery modules connected in parallel Serviceability	Delivers higher availability through redundant batteries.
User-replaceable batteries Battery replacement without tools	Increases availability by allowing a trained user to perform upgrades and replacements of the batteries reducing Mean Time to Repair (MTTR) Allows quick, easy battery replacement.
Automatic self-test	Periodic battery self-test ensures early detection of a battery that needs to be replaced.
Shippable with modules installed	Enables pre-installation UPS staging and testing and faster installation.
Modular design	Provides fast serviceability and reduced maintenance requirements via self- diagnosing, field-replaceable modules.
Manageability	
Network manageable	Provides remote management of the UPS over the network.
InfraStruXure	Enables centralized management via the APC InfraStruXure® Manager.
Manager Compatible	
LCD display	Alpha-Numeric Display which displays system parameters and alarms.
Audible Alarms	Provides notification of changing utility power and UPS conditions.
Programmable frequency	Ensures compatibility with different input frequencies.
LED status indicators SmartSlot	Quickly understand unit and power status with visual indicators. Customize UPS capabilities with management cards.
Total Cost of Ownership	
Input power factor	Minimizes installation costs by enabling the use of smaller generators and
correction	cabling.
Temperature- compensated battery charging	Prolongs battery life by regulating the charge voltage according to battery temperature.
Manual maintenance bypass	Reduces installation costs by eliminating the need for an external mechanical bypass.
Intelligent Battery Management	Maximizes battery performance, life, and reliability through intelligent, precision charging.
Protection	
regulation	Gives higher application availability by correcting poor frequency and voltage conditions without using the battery.
Safety-agency	Ensures the product has been tested and approved to work safely with the

approved	connected service provider equipment and within the specified environment. UL, FCC, CE, C-Tick approvals.
Cold-start capable	Provides temporary battery power when the utility power is out.

# Output

Output Power Capacity	16 kW / 20 kVA
Max Configurable Power	16 kW / 20 kVA
Nominal Output Voltage	120V,208V,208V 3PH
Output Voltage Note	Configurable for 208 and 220V - 3 Phase
Efficiency at Full Load	94%
Output Voltage Distortion	Less than 5% at full load
Output Frequency (sync to mains)	57 - 63 Hz for 60 Hz nominal
Crest Factor	Unlimited
Waveform Type	Sine wave
Output Connections	(1) Hard Wire 5-wire $(3PH + N + G)$
	(1) Screw Terminals
Bypass	Built-in Maintenance Bypass, Built-in Static Bypass

# Input

Nominal Input Voltage	208V 3PH
Input Frequency	40 - 70 Hz
Input Connections	Hard Wire 5-wire $(3PH + N + G)$
Input voltage range for main operations	165 - 240V
Other Input Voltages	220
Maximum Input Current	53A
Input Breaker Capacity	80A

### **Batteries & Runtime**

Battery Type	VRLA
Included Battery Modules	4
Typical recharge time	5 hour(s)
Replacement Battery	<u>SYBT4</u>
RBC <sup>™</sup> Quantity	4
Typical Backup Time at Half Load	45.8 minutes (8000 Watts)
Typical Backup Time at Full Load	18.2 minutes (16000 Watts)
Runtime Chart	Smart-UPS VT

## **Communications & Management**

Interface Port(s)	DB-9 RS-232,Smart-Slot
Pre-Installed SmartSlot <sup>™</sup> Cards	<u>AP9619</u>
Control panel	Multi-function LCD status and control console
Audible Alarm	Audible and visible alarms : configurable delays
Emergency Power Off (EPO)	Yes

## Physical

Maximum Height	1499.00 mm
Maximum Width	523.00 mm
Maximum Depth	925.00 mm
Net Weight	629.09 KG
Shipping Weight	660.00 KG
Shipping Height	1643.00 mm
Shipping Width	650.00 mm
Shipping Depth	1062.00 mm
Color	Black
Units per Pallet	1.00

### Environmental

Operating Environment	0 - 40 °C
Operating Relative Humidity	0%
Operating Elevation	0-999.9 meters
Storage Temperature	-50 - 40 °C
Storage Relative Humidity	0%
Storage Elevation	0-15000 meters
Audible noise at 1 meter from surface of unit	55.00 dBA
Online Thermal Dissipation	4238.00 BTU/hr
Protection Class	NEMA 1

## Conformance

Regulatory Approvals	cUL Listed,ISO 14001,ISO 9001,UL 1778
Standard Warranty	1 year repair or replace, Start-Up Service

\*\*The time to recharge to 90% of full battery capacity following a discharge to shutdown using a load rated for 1/2 the full load rating of the UPS.