

Q2,WA

# 山特 3C3 UPS RS232 通讯协议

PROTOCOL COMMAND

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## Hardware :

BAUD RATE ..... : 2400 bps  
DATA LENGTH ..... : 8 bits  
STOP BIT ..... : 1 bits  
PARITY ..... : NONE

## Commands :

Q2	Q2,XX	Status inquiry 2
WA	WA,XX	KW and KVA
S<n>	S<n>,XX	Shutdown

Computer: **Q2 <cr>**

UPS:

**MMM.M MMM.M MMM.M NNN.N PPP.P PPP.P PPP.P QQQ QQQ QQQ RR.R SSS.S TT.T  
b7b6b5b4b3b2b1b0**

**Input Voltage:** **MMM.M** M is an integer number 0 to 9. The Unit is Volt. Three Phases will represent Phase R-S-T in sequence

**I/P fault voltage:** **NNN.N** N is an integer number 0 to 9. The Unit is Volt.

**Output Voltage:** **PPP.P** P is an integer number 0 to 9. The Unit is Volt.

**Output Current:** Three Phases will represent Phase R-S-T in sequence  
**QQQ** QQQ is a percent of maximum current , not an absolute value.

**I/P frequency:** Three Phases will represent Phase R-S-T in sequence  
**RR.R** R is an integer number ranging from 0 to 9. The unit is Hz.

**Battery voltage:** **SSS.S** S is an integer number ranging from 0 to 9.

**Temperature:** **TT.T** T is an integer number ranging from 0 to 9. The unit is degree of centigrade.

**UPS Status:** **<b7b6b5b4b3b2b1b0>**. Where <bn> is a binary number „0“ or „1“.

### UPS status :

byte	Description
7	1 : Utility Fail ( Immediate )
6	1 : Battery Low
5	1 : Bypass/Boost Active
4	1 : UPS Failed
3	1 : UPS Type is Standby (0 is On_line)
2	1 : Test in Progress
1	1 : Shutdown Active
0	Reserved (always 0 )

**<cr>**

**Stop Byte: KW and KVA command**

Computer: **WA <cr>**

UPS:

**WWW.W WWW.W WWW.W VVV.V VVV.V VVV.V TTT.T SSS.S AAA.A AAA.A AAA.A QQQ  
b7b6b5b4b3b2b1b0 <cr>**

The first of the UPS respond is very similar to the existing inquiry Q2 however

**Output power:** WWW.W W is an integer number 0 to 9. The Unit is KW. R phase. Three Phases will represent Phase R-S-T in sequence

**Output complex power:** **VVV.V** V is an integer number 0 to 9. The Unit is KVA. R phase. Three Phases will represent Phase R-S-T in sequence

**Total power:** **TTT.T** T is an integer number 0 to 9. The Unit is KW. Include of three phase R,S,&T real power.

**Total complex power:** **SSS.S** S is an integer number 0 to 9. The unit is KVA. Include of three phase R,S,&T complex power.

**Output current:** **AAA.A** A is an integer number 0 to 9. The unit is A. R phase. Three Phases will represent Phase R-S-T in sequence

**O/P load:** **QQQ** QQQ is maximum of W% or VA%. VA% is a percent of maximum VA. W% is a percent of maximum real power.

**UPS Status:** **b7b6b5b4b3b2b1b0** The same of Q2UPS status :

**Stop Byte:** **<cr>**

## Shutdown command :

Computer: **S<n><cr>**

UPS: **Shut UPS output off in <n> minutes.**

The UPS output will be off in <n> minutes, even if the utility is present.

But if the battery under occur before <n> minutes, the output is turned off immediately.

After UPS shut down, the controller of UPS monitors the utility. If the utility is there, the UPS will wait for 10 seconds and connect the utility to output.

<n> is a number ranging from.2, .3, ..., 01, 02,..., to 10.

For example : S.3<cr> --- shut out put off in ( .3) minutes