1K~3K PROTOCOL

COMMANDS TABLE

1	Q	Status inquiry
2	Q1	Status inquiry1
3	Q4	Status inquiry4
4	QF	Fault status inquiry
5	QP	Control parameter inquiry
6	MD	Model inquiry
7	PS<m>G<n>L<p>H<q>ExxxxDxxx	Set UPS control parameter
8	T	10 second test
9	TL	Test until battery low
10	T<n>	Test for specified time period
11	S<n>	Shutdown
12	S<n>R<m>	Shutdown and restore
13	C	Cancel shutdown
14	CT	Cancel Test
15	CB	Change RS232 Baud rate
16	PF	Set control parameter to default value

1，SORO COMMONDS

1	Q	Status inquiry
2	Q1	Status inquiry 1
3	Q4	Status inquiry 4
4	QF	Fault status inquiry
5	MD	Model inquiry
6	PS<m>G<n>L<p>H<q>ExxxxDxxx	Set UPS control parameter
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10	TL	Test until battery low
11	T<n>	Test for specified time period
12	S<n>	Shutdown

13	S<n>R<m>	Shutdown and restore
14	C	Cancel shutdown
15	CT	Cancel Test
16	CB<n>	Change RS232 Baud rate

SORO COMMANDS DETAILS

1. Status inquiry

Computer : Q<cr>

UPS:UPS status data stream ,such as MMM.MNNN.NPPP.PQQQRR.RS.SSTT.TU<cr>

UPS status data stream :

(a) Start byte: (

(b) I/P voltage: MMM.M

M is an integer number ranging from 0 to 9.

The unit is Volt.

(c) I/P fault voltage: NNN.N

N is an integer number ranging from 0 to 9.

The unit is Volt.

** For OFF LINE UPS **

Its purpose is to identify a short duration voltage glitch which cause OFF line UPS to go to Inverter mode. If this occurs input voltage will appear normal at query prior to glitch and will still appear normal at next query. The I/P fault voltage will hold glitch voltage till next query. After query, the I/P fault voltage will be same as I/P voltage until next glitch occurs.

** For ON LINE UPS **

Its purpose is to identify a short duration utility fail which cause ON line UPS to go to Battery mode. If this occurs input voltage will appear normal at query prior to fail and will still appear normal at next query. The I/P fault voltage will hold utility fail voltage till next query. After query, the I/P voltage will be same as I/P voltage until next utility fail occurs.

(d) O/P voltage : PPP.P

P is an integer number ranging from 0 to 9.

The unit is Volt.

(e) O/P load : QQQ

For Off-line UPS:

QQQ is a percent of maximum VA, not an absolute value.

For On-line UPS:

QQQ is maximum of W% or VA%.

VA% is a percent of maximum VA.

W% is a percent of maximum real power.

(f) I/P frequency : RR.R

R is an integer number ranging from 0 to 9.

The unit is HZ.

(g) Battery voltage: SS.S or S.SS

S is an integer number ranging from 0 to 9.

For on-line units battery voltage/cell is provided in the form S.SS .For standby units actual battery voltage is provided in the form SS.S .UPS type in UPS status will determine which reading was obtained.

(h) Temperature : TT.T

T is an integer number ranging from 0 to 9.

The unit is degree of centigrade.

(i) UPS Status : <U>

<U> is one byte of binary information such as

<b7b6b5b4b3b2b1b0>.

Where <bn> is a binary number "0" or "1".

UPS status :

Bit	Remarks
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)

(j) Stop Byte: <cr>

Example : Computer : Q<cr>

UPS: (208.4140.0208.403459.92.0535.0U<cr>

Let U is 00110000

Means : I/P voltage is 208.4V.

I/P fault voltage is 140.0V.

O/P voltage is 208.4V.

O/P load is 34 %.

I/P frequency is 59.9 HZ.

Battery voltage is 2.05V.

Temperature is 35.0 degrees of centigrade.

UPS type is on-line , UPS failed, Bypass active , and Shutdown not active .

2. Status Inquiry :

Computer : Q1<cr>

UPS: UPS status data stream ,such as (MMM.M NNN.N PPP.P QQQ RR.R S.SS TT.T b7b6b5b4b3b2b1b0J<cr>

The binary code is modified to 8 bytes ASCII code for avoiding the binary code confused with ASCII control code. Between each data stream add one space for the data separation.

Example :

Computer : Q1<cr>

UPS: (208.4 140.0 208.4 034 59.9 2.05 35.0 001100001<cr>

Means :   I/P voltage is 208.4V.

I/P fault voltage is 140.0V.

O/P voltage is 208.4V.

O/P load is 34 % .

I/P frequency is 59.9 HZ.

Battery voltage is 2.05V.

Temperature is 35.0 degrees of centigrade.

UPS type is on-line , UPS failed, Bypass active , and Shutdown not active .

3. Status Inquiry:

Computer: Q4<cr>

UPS: (MMM.M HHH.H LLL.L NNN.N PPP.P QQQ DDD RR.R KKK VVV SSS.S TT.T XXXXXXXX<cr>

(a) Start byte: (

(b) Input voltage: MMM.M

M is an Integer number 0 to 9. The unit is Volt.

(c) Input maximum voltage: HHH.H

H is an Integer number 0 to 9. The unit is Volt.

(d) Input minimum voltage: LLL.L

L is an Integer number 0 to 9. The unit is Volt.

(e) Input fault voltage: NNN.N

N is an Integer number ranging from 0 to 9. The unit is Volt.

(f) Output voltage: PPP.P

P is an Integer number ranging from 0 to 9. The unit is Volt.

(g) Output current pecentage: QQQ

QQQ is a percent of maximum current, not an absolute value.

(h) Output load pecentage: DDD

For Off-line UPS: LLL is a percent of maximum VA, not an absolute value.

For On-line UPS: LLL is maximum of W% or VA%.

VA% is a percent of maximum VA.

W% is a percent of maximum real power.

(i) Input frequency: RR.R

R is an integer ranging from 0 to 9. The unit is Hertz.

(j) Positive BUS voltage: KKK

K is an Integer ranging from 0 to 9. The unit is Volt.

(k) Negative BUS voltage: VVV

V is an Integer ranging from 0 to 9. The unit is Volt.

(l) Battery voltage: SSS.S

S is an Integer ranging from 0 to 9. The unit is Volt.

(m) Temperature: TT.T

T is an integer ranging from 0 to 9. The unit is °C

(n) Ups status: XXXXXXXX

X :If several status occur at the same time, the X is 1~8 letters adjust, it means:

A: Utility Fail

B: Battery Low

C: Bypass/Boost Active

D: UPS Failed
E: Test in Progress
F: Shutdown Active
G: SITE fault
H: EPROM fail
I: Test passed – Result: OK
J: Test passed – Result: Failed
K: Test not Possible or Inhibited
L: Test Status Unknown
M: UPS normal mode
N: UPS 110% overload

O~Z are reserved for the future use.

The above status can occur at the same time

Example:

Computer: Q4<cr>

UPS: (220.2 250.5 200.0 136.0 220.2 100 100 50.0 370 375 41.0 45.0 LM<cr>

Means :   I/P voltage is 220.2V.

Maximum I/P voltage is 250.5V

Minimum I/P voltage is 200.0V

I/P fault voltage is 136.0V.

O/P voltage is 220.2V.

O/P current is 100%

O/P load 100%

I/P frequency is 50.0 HZ.

Positive BUS voltage is 370V

Negative BUS voltage is 375V

Battery voltage is 41.0V.

Temperature is 45.0 degrees of centigrade.

Test Status Unknown and UPS status is line mode.

4. Fault Status Inquiry :

Computer: QF<cr>

UPS: (KK PPP FF.F OOO EE.E LLL CCC PPP NNN BB.B TT.T <b7b6b5b4b3b2b1b0><cr>

(a) Start byte: (

(b) Fault kind: KK

K is 2 bytes of ASCII code, define as following:

Fault Classify	FAULT KIND(KK)	Condition
Bus Fault.	Positive Bus **$05**(line mode) **$0C**(Bat mode) Negative Bus **$25**(line mode) **$2C**(Bat mode)	±Bus.V-440Vdc 累加到有进位，则 BUS FAULT
		LINE.V>420V，±Bus.V-440Vdc 累加到有进位，则 BUS FAULT
Inverter Fault.	**$04**(line mode) **$0B**(Bat mode)	Inverter O/P>264Vac or Inverter O/P<193Vac
		Inverter O/P short (O/P CUR.>2A(C1k) and INV. O/P<40Vac) .
Over Heat Fault.	**$06**(line mode) **$0A**(Bat mode)	Detecting NTC's temperature on POWER pcb. If temperature >85℃
		FAN stop running or running slowly
Battery Over voltage fault.	**$0D**	Battery Voltage >14.4V Per unit
INV MODE O/P SHORT Fault	**$0F**	Detecting no inv_zero interrupt,7any time in period of 80ms then set ups short fault
Over load fault	**$03**(line mode) **$09**(bat mode)	Load>=150% 192 ms then overload fault
Charger fault	**$07**	Line mode, battery voltage <=37.5v,10ms,then charger fault

(c) I/P voltage before fault: PPP

P is an integer number ranging from 0 to 9. The unit is Volt.

(d) I/P frequency before fault: FF.F

F is an integer number ranging from 0 to 9. The unit is HZ.

(e) Inverter O/P voltage before fault: OOO

O is an integer number ranging from 0 to 9. The unit is Volt.

(f) Inverter O/P frequency before fault: EE.E

E is an integer number ranging from 0 to 9. The unit is HZ.

(g) O/P load before fault: LLL

LLL is maximum of W% or VA%.

VA% is a percent of maximum VA.

W% is a percent of maximum real power.

(h) O/P current before fault: CCC

CCC is a percent of maximum current.

(i) Positive Bus voltage before fault: PPP

P is an integer number ranging from 0 to 9. The unit is volt.

(j) Negative Bus voltage before fault: NNN

N is an integer number ranging from 0 to 9. The unit is volt.

(k) Battery voltage before fault: BBB.B

B is an integer number ranging from 0 to 9. The unit is volt

(l) Temperature before fault: TT.T

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

(m) UPS running status before fault: <b7b6b5b4b3b2b1b0>

<b7b6b5b4b3b2b1b0> is one byte of binary information.
Each bit is transferred into ASCII code.
<bn> is a binary number "0" or "1".

Bit	Remarks
7	1:DCTODC on
6	1:PFC on
5	1: INVERTER on
4	Reserved(always 0)
3	1:input relay on
2	1:O/P relay on
1	Reserved(always 0)
0	Reserved(always 0)

This fault data stream will be saved into EEPROM.

Example:

Computer: QF<cr>

UPS: (04 208 41.0 160 50.0 102 100 160 190 041.0 69.0 01101100<cr>

Means: Inverter fault in line mode

I/P voltage is 208V.

I/P frequency is 41.0HZ.

O/P voltage is 160V.

O/P frequency is 50.0HZ

Load is 102%

O/P current is 100%

Positive Bus voltage is 160V

Negative Bus voltage is 190V

Battery voltage is 41.0V.

Temperature is 69.0 ℃

IC3525 off, PFC on , INVERTER on, input relay on , O/P relay on

If there are no UPS fail notes in EEPROM, UPS reply (OK

Example: computer: QF<cr>

UPS: (OK<cr>

5. Model Inquiry :

Computer: MD<cr>

UPS: TTTT, WWWW, P/P, MMM, NNN, R, BB.B, AA.A, CC.C<cr>

(a) UPS Model: TTTT

  For example: C1KS

(b) Output rated power: WWWW

  W is an integer number ranging from 0 to 9. The unit is watt.

(c) Input phase/Output phase: P/P

  P is an integer number of 1 or 3.

(d) Nominal I/P Voltage: MMM

  M is an integer number ranging from 0 to 9. The unit is volt.

(e) Nominal O/P Voltage: NNN

  N is an integer number ranging from 0 to 9. The unit is volt.

(f) Cells Number: R

  R is an integer number ranging from 0 to 9.

(g) Battery standard voltage per unit: BB.B

  B is an integer number ranging from 0 to 9. The unit is volt.

(h) Battery start charge voltage per unit: AA.A

  A is an integer number ranging from 0 to 9. The unit is volt.

(i) Battery start discharge voltage per unit: CC.C

  C is an integer number ranging from 0 to 9. The unit is volt

For example:

Computer: MD<cr>

UPS: C1k, 700,1/1,220,220,3,12.0,11.5,13.8<cr>

6. UPS Parameters setting:

(1) Computer: PS<m>G<n>L<p>H<q>E<xxx>D<xxx><cr>

UPS: (a)set low detect frequency to <m> Hz

    <m> is a number ranging from 40.0 to 49.0, default 46.0Hz. The precision is
        0.1Hz.

  (b) set high detect frequency to <n> Hz .

    <n> is a number ranging from 51.0 to 60.0, default 54.0Hz. The precision is
        0.1Hz

  (c) set low voltage range on bypass to <p> volt.

   <p> is a number ranging from 80 to 219, default 80V. The precision is 1 volt.

  (d) set high voltage range on bypass to <q> volt.

    <q> is a number ranging from 221 to 286,default 264V. The precision is
       1 volt.

  (e) the meaning of "x" is listed in the following table..

E: means enable, D: means disable

X	Control setting
P	Enable/disable bypass audible warning
B	Enable/disable battery mode audible warning
K	Enable/disable key control bypass audible warning.
C	Enable/disable key control battery mode audible warning.
R	Enable/disable auto-reboot.
O	Enable/disable bypass when UPS turn off.
A	Enable/disable audible alarm

Example:
Computer: PS40.0G60.0L100H250E<pka>D<bcro><cr>
UPS: Set low detect frequency to 40.0Hz.
Set high detect frequency to 60.0Hz.
Set low voltage range on bypass to 100V.
Set high voltage range on bypass to 250V.
Enable bypass audible warning.
Disable battery mode audible warning.
Enable key control bypass audible warning.
Disable key control battery mode audible warning.
Disable auto-reboot.
Disable bypass when UPS turn off.
Enable audible alarm.

(2) We can only set one parameter as the following:
(a) PS<m><cr>:only set low detect frequency
(b) PG<n><cr>:only set high detect frequency
(c) PL<p><cr>:only set low voltage range on bypass
(d) PH<q><cr>:only set high voltage range on bypass
(e) PE<xxx><cr>:only enable several items above
(f) PD<xxx><cr>:only disable several items above
Example:
Computer:PL140<cr>
UPS: set low voltage range on bypass to 140V
(3) we can not only set several parameters but also one parameter at the same time
Example:
Computer:PS40.0H250Ebr<cr>
UPS: Set low detect frequency to 40.0Hz
Set high voltage range on bypass to 250V
Enable battery mode audible warning
Enable auto-reboot

7. UPS Parameters Inquiry:
Computer: QP<cr>
UPS: (MM.M NN.N PPP QQQ ExxxDxxxx<cr>
Example:
Computer: QP<cr>
UPS: (46.0 54.0 80 264 EpkraDbco<cr>
Means: Low detect frequency is 46.0Hz.

High detect frequency is 54.0Hz.
Low voltage range on bypass is 80V.
High voltage range on bypass is 264V.
Enable bypass audible warning.
Disable battery mode audible warning.
Enable key control bypass audible warning.
Disable key control battery mode audible warning.
Enable auto-reboot.
Disable bypass when UPS off.
Enable audible alarm.

Although the "P" command set one or several parameters before, the "QP"
command can inquiry all parameters
Example:
Computer :PG59.9<cr>
UPS :set high detect frequency to 59.9Hz
Computer :QP<cr>
UPS:46.6 59.9 80 264 EpkraDbco<cr>

8. UPS Parameters default value setting:

Computer: PF<cr>
UPS: All UPS parameters set to default value.
(a) set low detect frequency to 46.0Hz .
(b) set high detect frequency 54.0Hz .
(c) set low voltage range on bypass to 80V.
 (d) set high voltage range on bypass to 264V.
 (e) UPS control setting: EpbkcraDo

x	Default value
p	enable bypass audible warning
b	enable battery mode audible warning
k	enable key control bypass audible warning.
c	enable key control battery mode audible warning.
r	enable auto-reboot.
o	Disable bypass when UPS off.
a	enable audible alarm

9.   10 seconds test command:

Computer: T<cr>
UPS :Test for 10 seconds and return to utility.

If battery low occur during testing, UPS will return to utility immediately.
This comand is only implemented for 10xx, 80xx series ups.
If this command is sent to 20xx series ups, this ups will have no action and response

10. Test until battery low command:

Computer :TL<cr>
UPS :Test until battery low and return to utility.
This command is only implemented for 10xx, 80xx series ups.
If this command is sent to 20xx series ups, this ups will have no action and response.

11. **Test for specified time command:**

Computer :T<n><cr>
UPS :Test for <n> minutes
This command is only implemented for 10xx, 80xx series ups.
If this command is sent to 20xx series ups, this ups will have no action and response.

12. **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

13. **Shutdown and restore command:**
Computer :S<n>R<m><cr>
UPS :Shut UPS output off in <n> minutes and waiting for <m> minutes then turn on UPS out put again.

The shut down sequence is the same as the previous command. When the <m> minutes expired, the utility do not restore, the UPS will wait until utility restore.
If UPS is in shut down waiting status, the "C" command can let the shut down command cancelled.
If UPS is in restore waiting status, the "C" command can let the UPS output turned on, but UPS must be hold off at least 10 seconds. (if utility is present)
<n> is a number ranging from .2, .3, ..., 01, 02, ..., to 99.
<m> is a number ranging from 0001 to 9999.

14. Cancel shutdown command:
Computer :C<cr>
UPS:Cancel the SN<n><cr> and SN<n>R<m><cr> command.
If UPS is in shut down waiting state, the shut down command is cancelled. If UPS is in restore.
If UPS is in restore waiting state, the UPS output is turned on, but UPS must be hold off at least 10 seconds. (if utility is present)

15. **Cancel test command :**
Computer :CT<cr>
UPS :Cancel all test activity and connect the utility to output immediately.

16 . **change RS232 baud rate command:**
Computer: CB<n><cr>
UPS: (<n><cr>

Baud rate:<n>
    n is 24 , 48 , 96
    if baud rate is changed to 2400bps,<n>=24
    if baud rate is changed to 4800bps,<n>=48
      if baud rate is changed to 9600bps,<n>=96
Default value: 2400bps
Example:
 Computer: CB<48><cr>
 UPS: (48<cr>
Means: RS232 baud rate is changed to 4800 bps

2，COMMONDS

1	Q1	Status Inquiry
2	T	10 Seconds Test
3	Q	Turn On/Off beep
4	S<n>R<m>	Shut Down and Restore Command
5	C	Cancel Shut Down Command
6	I	UPS just resend 8 bytes space character
7	F	UPS Rating Information
8	M	UPS just resend "C"
9	V220	Set UPS Output Rating Voltage is 220V
10	V230	Set UPS Output Rating Voltage is 230V
11	V240	Set UPS Output Rating Voltage is 240V

CENTRALION COMMONDS DETAILS
1. Status Inquiry:

Computer : Q1<cr>
    UPS   : UPS status data stream, such as
      (MMM.M NNN.N PPP.P QQQ RR.R S.SS TT.T b7b6b5b4b3b2b1b0<cr>

    UPS status data stream :
      There should be a space character between every field for data separation.
      The meaning of each field is list as followed:

      a. Start byte   : (

      b.I/P voltage : MMM.M
        M is and integer number ranging from 0 to 9. The unit is Volt.

      c.I/P fault voltage : NNN.N
       N is and integer number ranging from 0 to 9. The unit is Volt.

      ** For OFF LINE UPS**

Its purpose is to identify a short duration voltage glitch which cause OFF line UPS to go to Inverter mode. If this occurs, the input voltage will appear normal at query prior to glitch and will still appear normal at next query.

The I/P fault voltage will hold glitch voltage till next query. After query, the I/P fault voltage will be same as I/P voltage until next glitch occurs.

** For ON LINE UPS**

Its purpose is to identify a short duration utility fail which cause ON line UPS to go to battery mode. If this occurs input voltage will appear normal at query prior to fail and will still appear normal at next query.

The I/P fault voltage will hold utility fail voltage till next query. After query, the I/P voltage will be same as I/P voltage until next utility fail occurs.

d. O/P voltage : PPP.P
  P is an integer number ranging form 0 to 9. The unit is Volt.

e. O/P current : QQQ
  QQQ is a percentage of maximum current, not an absolute value.

f. O/P frequency : RR.R
  R is an integer number ranging from 0 to 9. The unit is Hz.

g. Battery voltage : SS.S or S.SS
S is an integer number ranging from 0 to 9. For on-line units battery voltage/cell is provided in the form S.SS. For standby units actual battery voltage is provided in the form SS.S. UPS type in UPS status will determine which reading was obtained.

h. Temperature : TT.T
  T is an integer number ranging form 0 to 9. The unit is degree celsius.

i. UPS Status : <U>
<U> is one byte of binary information such as <b7b6b5b4b3b2b1b0>.
Where bn is a ASCII character '0' or '1'.

UPS status :

Bit	Description
7	1 : Utility Fail (Immediate)
6	1 : Battery Low
5	1 : Bypass/Boost or Buck Active
4	1 : UPS Failed
3	1 : UPS Type is Line-Interactive (0 is On_line)
2	1 : Test in Progress
1	1 : Shutdown Active

0	1 : Beeper On

j.Stop Byte   : <cr>

Example: Computer : Q1<cr>
                UPS : (208.4 140.0 208.4 034 59.9 2.05 35.0 00110000<cr>

                Means : I/P voltage is 208.4V.
                         I/P fault voltage is 140.0V.
                         O/P voltage is 208.4V.
                         O/P current is 34 %.
                         I/P frequency is 59.9 HZ.
                         Battery voltage is 2.05V.
                         Temperature is 35.0 degrees of centigrade.
                         UPS type is on-line , UPS failed. Bypass
                         active , and shutdown not active.

2. Test for 10 seconds:
Computer : T<cr>
UPS   : Test for 10 seconds and return to utility.

If battery low occurs during testing, UPS will return to utility immediately.

3. Turn On/Off beep -- Toggle the UPS beeper :
Computer : Q<cr>

When the AC power failed, UPS will generate a warning beep to inform the

manager. Manager could toggle the warning beep by sending this command .

4. Shutdown and Restore Command :
Computer : S<n>R<m><cr>
UPS   : Shut UPS output off in <n> minutes, and waiting for <m> minutes
then turn on UPS output again.
   a. The UPS output will be off in <n> minutes, even if the utility power is
       present.
   b. If the battery low occurs before <n> minutes, the output is turned off
       immediately.
   c. If UPS is in shutdown waiting state, the "C" command can let the shutdown
       procedure cancelled.
   d. If, after <m> minutes have expired, the utility has not been restored, the UPS
       will wait until it is restored.
   e. If UPS is in restore waiting state, the "C" command can let the UPS output
       turned on, but UPS must be hold off at least 10 seconds. (if utility is present)
   f. <n> is a number ranging form .2, .3, ..., 01, 02, ..., up to 10.
   g. <m> is a number ranging form 0000 to 9999. If it is 0000, there will be no
       restore.

5. Cancel Shutdown Command :
Computer : C<cr>
UPS   : Cancel the SN<n><cr> and SN<n>R<m><cr> command.
a. If UPS is in shut down waiting state, the shut down command is cancelled.

b. If UPS is in restore waiting state, the UPS output is turned on, but UPS must be hold off at least 10 seconds.
(if utility is present)

6. UPS Information Command:
        Computer   : I<cr>
        UPS   : UPS just resend 8 bytes space character.<cr>
      Version   : 10 characters, leave space if less than 10
characters

There should be a space character between every field for separation.

7. UPS Rating Information:
    Computer   : F<cr>
    UPS   : #MMM.M QQQ SS.SS RR.R<cr>
This function makes the UPS answer the rating value of UPS. There should be a space character between every field for separation. The UPS's response contains the following information field:
        a. Rating Voltage   : MMM.M
        b. Rating Current   : QQQ
        c. Battery Voltage   : SS.SS or SSS.S
        d. Frequency   : RR.R

8. UPS Password
  Computer   : M<cr>
   UPS   : C<cr>
  RUN formula

9, UPS Output voltage selection
  Computer   :V220<cr>
  UPS   :220V<cr>

  Computer   :V230<cr>
  UPS   :230V<cr>

  Computer   :V240<cr>
  UPS   :240V<cr>