高电科技

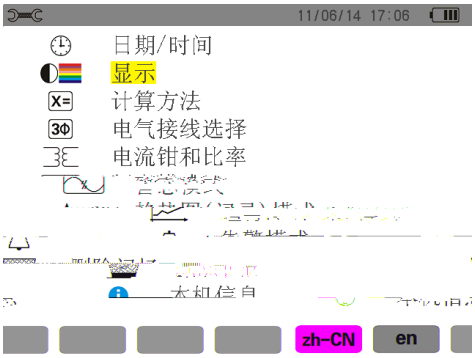
HIGH VOLTAGE TECHNOLOGY

HIGH VOLTAGE TECHNOLOGY

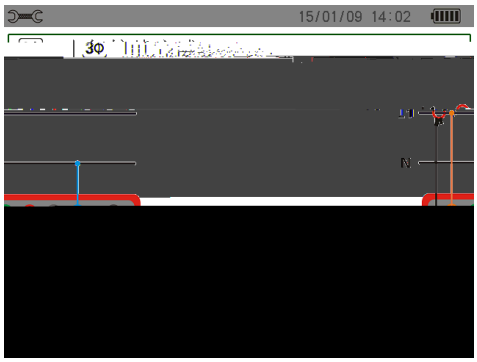
STQR5000

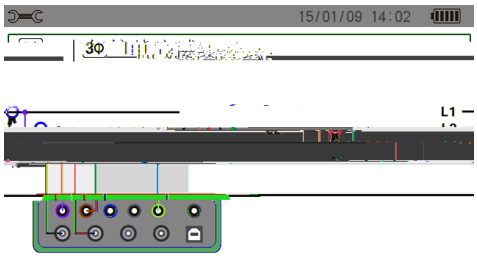
使用说明书

杭州高电科技有限公司

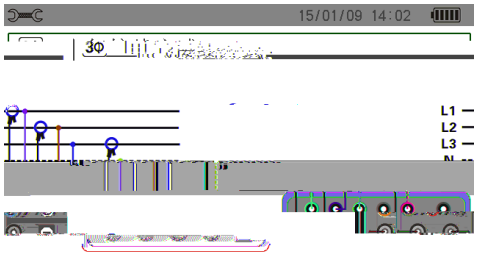


Ń Ê

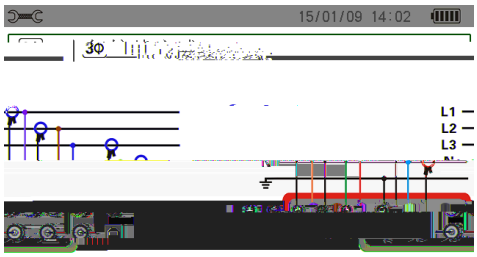




分相



3相3线或4线



3相5线

zh-CN en

▲▼

▲▼

“ ” “ ” “ ”

无功值计算

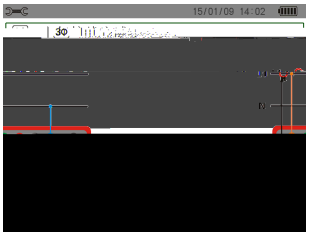
▲

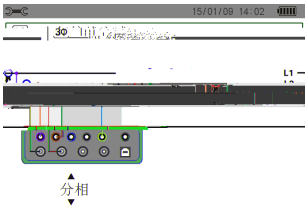
不含谐波测量

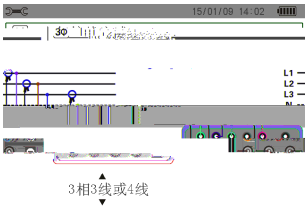
▼

▲ ▼

3Φ





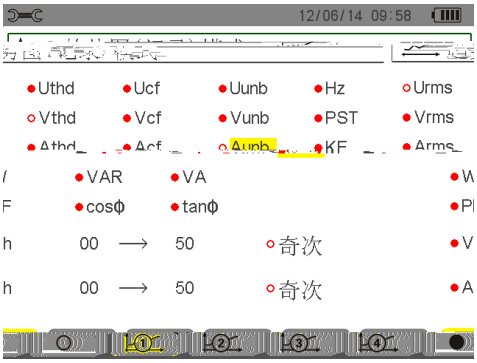


▲ ▼

“ **A** ”

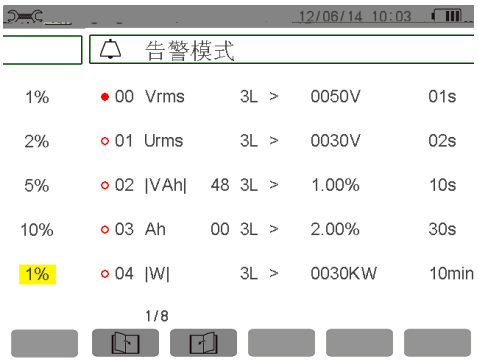
“ **A** ”

◀ ▶


12/06/14 09:58
Uthd
Ucf
Uunb
Hz
Urms
Vthd
Vcf
Vunb
PST
Vrms
KF
VAR
VA
cosϕ
tanϕ
00
50
奇次
00
50
奇次

W	
VAR	
VA	
PF	
DPF	

Tan



▲▼

Vah Ah Uh

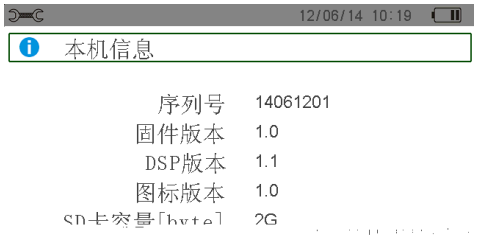
▲▼

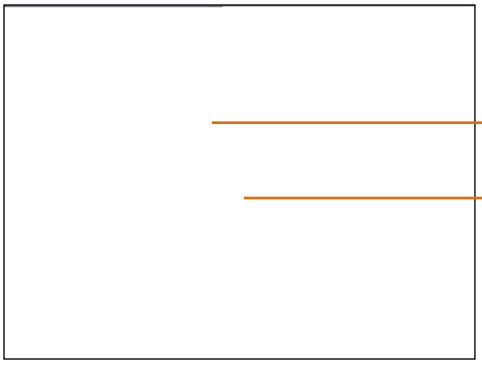
Vah Ah Uh Vh

“

”

“ ”


12/06/14 10:19
本机信息
序列号 14061201
固件版本 1.0
DSP版本 1.1
图标版本 1.0

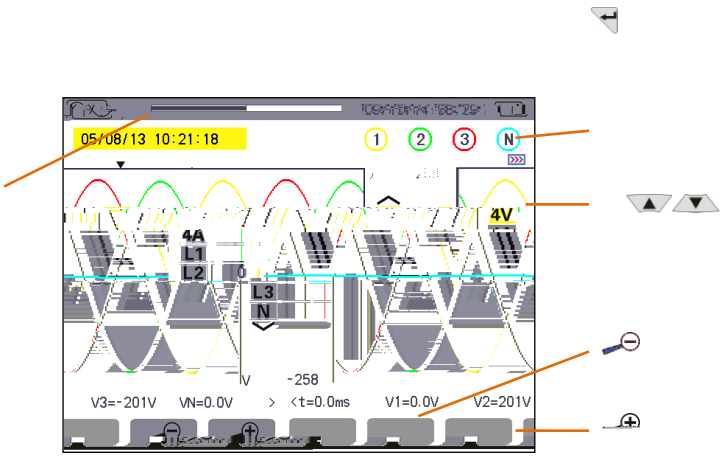

6.2
6.3

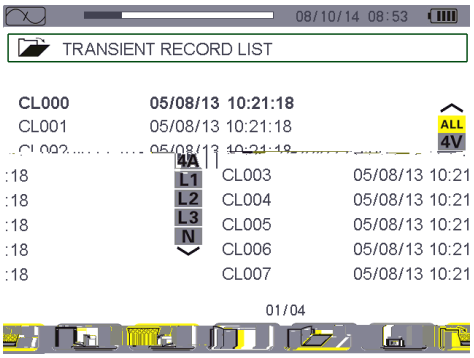
“ ”

“ ”

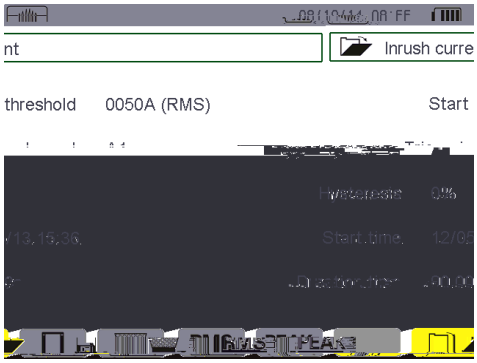
“ ”

-ALL
-4V 4
-4A

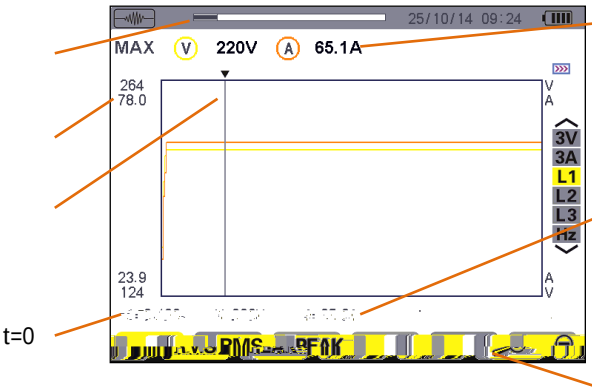

05/08/13 10:21:18
1
2
3
N
4V
4A
L1
L2
L3
N
-258
V3=-201V
VN=0.0V
<t=0.0ms
V1=0.0V
V2=201V


08/10/14 08:53
TRANSIENT RECORD LIST
CL000 05/08/13 10:21:18
CL001 05/08/13 10:21:18
ALL
4V
4A
L1
L2
L3
N
:18 CL003 05/08/13 10:21
:18 CL004 05/08/13 10:21
:18 CL005 05/08/13 10:21
:18 CL006 05/08/13 10:21
:18 CL007 05/08/13 10:21
01/04

“ ”


nt
Inrush curre
threshold
0050A (RMS)
Start

RMS **L1**



MAX: RMS
V: RMS
A: RMS

V1 1
A1 1

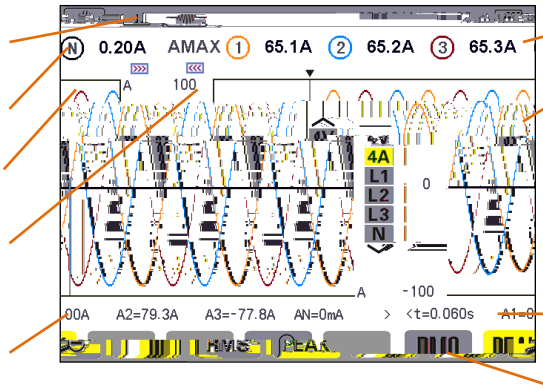
t=0

6-10 **RMS** **L1**

PEAK

PEAK

PEAK **4A**



AMAX: RMS

4V: 3
4A: 3
L1,L2,L3: 1 2 3

N:

A1,A2,A3:
AN:

t=0

6-11 **4A**

A1 **PEAK**

MAX: RMS

A1: 1

t=0

6-12 **A1**

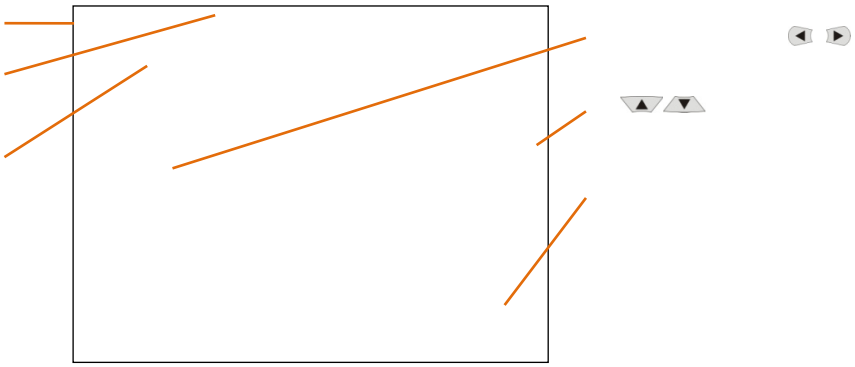
L1

2L L1 L2

3L L1 L2 L3 -.+

VA

3L



VAh03
%
+000

1

L1

`

3L

L1

L1

4V RMS

3U THD

3U THD

3V THD

3V THD

3U CF

3U CF

3V CF

3V CF

3A CF

3A CF

L1 L2 L3

RMS

3U Max. Min.

RMS

1 2 3

RMS
MAX **RMS**

MIN **RMS**
PK+
PK-

3U Max.-Min.

4V Max. Min.

1 2 3

RMS
MAX **RMS**

4V Max.-Min.

4A Max. Min.

4A Max.-Min.

L1

4A

RMS DC THD DF CF KF

4A

L1

RMS THD DF CF DC PST KF

L1

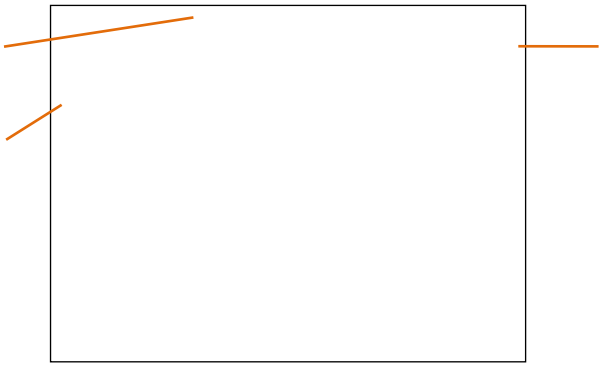
3U

3A

L1

V1
A1

φ VA



8-21 **L1**

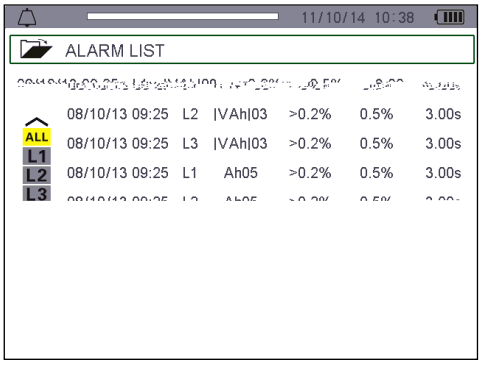
L2 L3

9.

Vrms Urms Arms PST

Vcf Ucf Acf Vunb Aunb Hz KF Vthd Uthd Vdf W VAR VA DPF PF Vh Uh Ah Vah

Ah$>Û- ?ö h Ö?ö m1y Ä


11/10/14 10:38
ALARM LIST
ALL
L1
L2
L3
08/10/13 09:25 L2 |VAh|03 >0.2% 0.5% 3.00s
08/10/13 09:25 L3 |VAh|03 >0.2% 0.5% 3.00s
08/10/13 09:25 L1 Ah05 >0.2% 0.5% 3.00s

10.

10-1

1

“ ” ▲▼

“ ”

“ ”

“ ”

“ ”

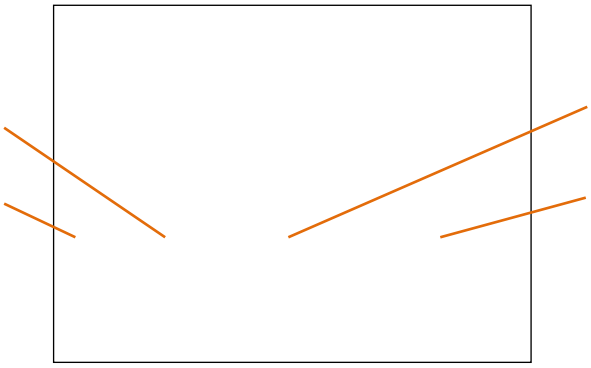
“ ”

“ ”

. b

Urms	φ φ
Uthd	φ φ
Ucf	φ φ
Uunb	φ φ
Hz	
Vrms	
Vthd	
Vcf	
Vunb	φ φ
PST	
Arms	
Athd	
Acf	
Aunb	φ φ
KF	
W	
VAR	
VA	
PF	
} • ”	
Tan φ	
?	

VAh,Ah,Vh Uh
“ ”



Vah Ah Vh Uh 4
(0-50)

▲▼

“ ”

й Ď µ ł µ

10-12 **L2**

11.

L1

L1

W	
Wh	
VAR	
VARh	
VA	∑
VAh	
PF	
}•”	
d v”	
”**VA**	

L2 L3 L1 L2 L3 ∑

PF...

3L

Σ

W	
Wh	
VAR	
VARh	
VA	
VAh	

11.6

3L

(3L)

W	
Wh	
VAR	
VARh	
VA	

11-9

11-10

12.

?

	°
	×

15.2.2

12V

Ą

≤				

17.

$$\mathrm{Vdem}[i] = \sqrt{\frac{1}{NechDemPer} \cdot \sum_{n=Zero}^{(Zéro\ suivant)-1} V[i][n]^2}$$

$$\mathrm{Udem}[i] = \sqrt{\frac{1}{NechDemPer} \cdot \sum_{n=Zéro}^{(Zéro\ suivant)-1} U[i][n]^2}$$

$$\mathrm{Idem}[i] = \sqrt{\frac{1}{NechDemPer} \cdot \sum_{n=Zéro}^{(Zéro\ suivant)-1} I[i][n]^2}$$

ICE61000-4-15

i=3 (Upp Upm)

[redacted]

$$\mathrm{Vcf}[i] = \frac{\max(|\mathrm{Vpp}[i]|, |\mathrm{Vpm}[i]|)}{\sqrt{\frac{1}{NechPer} \cdot \sum_{n=0}^{NechPer-1} V[i][n]^2}}$$

$$\mathrm{Acf}[i] = \frac{\max(|\mathrm{App}[i]|, |\mathrm{Apm}[i]|)}{\sqrt{\frac{1}{\text{[illegible]}} \cdot \sum_{n=0}^{NechPer-1} A[i][n]^2}}$$

i=3 (Urms)

$$\mathrm{Vrms}[i] = \sqrt{\frac{1}{NechSec} \cdot \sum_{n=0}^{NechSec-1} V[i][n]^2}$$

$$\mathrm{Urms}[i] = \sqrt{\frac{1}{NechSec} \cdot \sum_{n=0}^{NechSec-1} U[i][n]^2}$$

$$\mathrm{Arms}[i] = \sqrt{\frac{1}{NechSec} \cdot \sum_{n=0}^{NechSec-1} A[i][n]^2}$$

$$a = e^{j\frac{2\pi}{3}}$$

[redacted]

$$\mathrm{Vrms}_{-} = \frac{1}{3}(\mathrm{VFrms}[0] + a^2 \cdot \mathrm{VFrms}[1] + a \cdot \mathrm{VFrms}[2])$$

$$\mathrm{Vrms}_{+} = \frac{1}{3}(\mathrm{VFrms}[0] + a \cdot \mathrm{VFrms}[1] + a^2 \cdot \mathrm{VFrms}[2])$$

$$\mathrm{Arms}_{-} = \frac{1}{3}(\mathrm{AFrms}[0] + a^2 \cdot \mathrm{AFrms}[1] + a \cdot \mathrm{AFrms}[2])$$

$$\mathrm{Arms}_{+} = \frac{1}{3}(\mathrm{AFrms}[0] + a \cdot \mathrm{AFrms}[1] + a^2 \cdot \mathrm{AFrms}[2])$$

Ṛ ЖҚ Ḳ Ḵ

$$\tau_k = \frac{c_k}{c_4} 100$$

$$f_k = \frac{k}{4} f_4$$

$$\frac{\text{[illegible]}}{\text{[illegible]}}, \text{Aharm}_{\_} = \frac{1}{3}\sum_{j=0}^{2}\frac{\sum_{i=0}^{7}\text{[illegible]}}{\text{[illegible]}} \quad \text{Vharm}_{\_} = \frac{1}{3}\sum_{j=0}^{2}\frac{\sum_{i=0}^{7}\text{[illegible]}}{\text{[illegible]}}$$

[redacted]

[redacted]

$$\text{W}[i] = \frac{1}{NechSec}\cdot\sum_{n=0}^{NechSec-1} V[i][n]\cdot A[i][n$$

$$\text{Tan}[i] = \tan(\phi[i]) = -\frac{\sum_{n=0}^{NechSec-1} VF[i][n - \frac{NechPer}{4}] \cdot AF[i][n]}{\sum_{n=0}^{NechSec-1} VF[i][n] \cdot AF[i][n]}$$

$$\text{Wh}[0][i] = \sum_{\text{Tint}} \frac{W[i]}{3600}$$

$$\text{VARhL}[0][i] = \sum_{\text{Tint}} \frac{VAR[i]}{3600}$$

$$\text{VARhC}[0][i] = \sum_{\text{Tint}} \frac{-VAR[i]}{3600}$$

Wh[0][3] = Wh[0][0] + Wh[0][1] + Wh[0][2]

VAh[0][3] = VAh[0][0] + VAh[0][1] + VAh[0][2]

$$\text{VAh}[1][i] = \sum_{\text{Tint}} \frac{VA[i]}{3600}$$

$$\frac{VAR[i]}{3600}\ \mathrm{VARhL}[1][i] = \sum_{\mathrm{Tint}} \frac{[\ ]}{3}$$

$$\mathrm{VARhC}[1][i] = \sum_{\mathrm{Tint}} \frac{VAR[i]}{3600}$$

Wh[1][3] = Wh[1][0] + Wh[1][1] + Wh[1][2]

VAh[1][3] = VAh[1][0] + VAh[1][1] + VAh[1][2]

VARhL[1][3] = VARhL[1][0] + VARhL[1][1] + VARhL[1][2]

VARhC[1][3] = VARhC[1][0] + VARhC[1][1] + VARhC[1][2]

18.