

6000-count 3-Phase PowerClamp™ Series Communication Protocol

*COM Port Communication Protocol:

(Baud rate, Parity, Data bits, Stop bit) = (9600, N, 8, 1)

Command:

Set RQS pin of COM port to 0 for 1ms

Recommended program flow.

1. Initiate COM port
2. Wait for 100ms
3. Set RQS=1
4. Set (baud rate, parity, data bit, stop bit) = (9600, N, 8, 1)
5. Locate 20 RXD buffers
6. Clear RXD buffers
7. Set RQS=0
8. Wait for 1ms
9. Set RQS=1
10. Check & read RXD buffers
11. Decode RXD 1'st ~ 11'th buffers (see Figure 1 & Table 1)
12. Repeat STEP #6 ~ #11 to get next reading

Figure 1

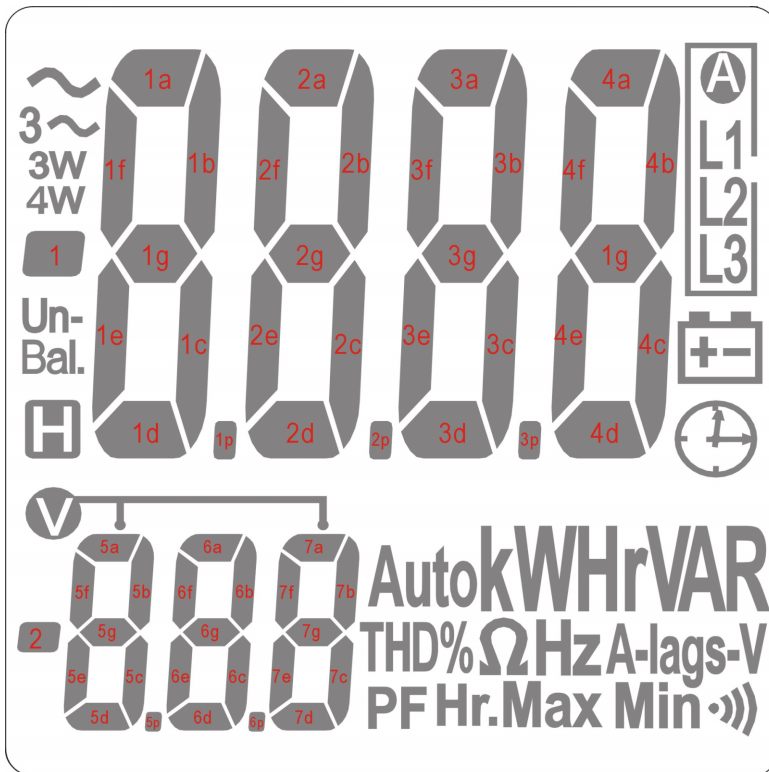


Table 1. LCD Map

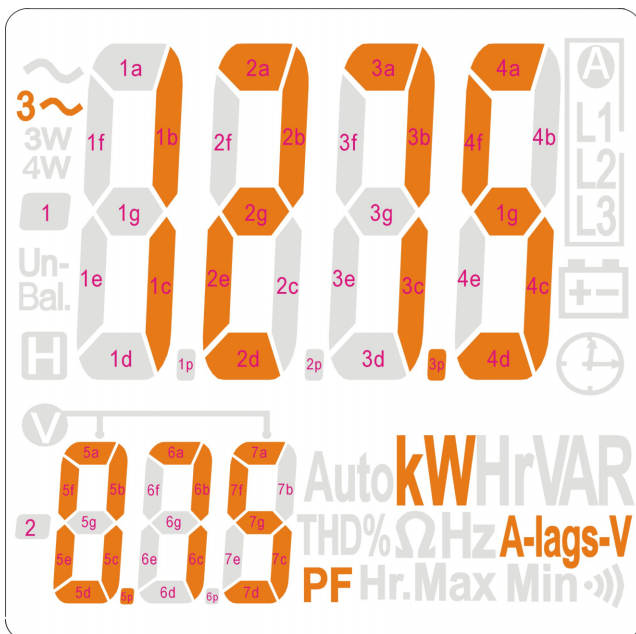
Byte no.	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
1	5d	5c	5g	5b	2	5e	5f	5a
2	6d	6c	6g	6b	5p	6e	6f	6a
3	7d	7c	7g	7b	6p	7e	7f	7a
4	4W	3W	3~	~	1	Bal.	Un-	
5	1d	1c	1g	1b	1	1e	1f	1a
6	2d	2c	2g	2b	1p	2e	2f	2a
7	3d	3c	3g	3b	2p	3e	3f	3a
8	4d	4c	4g	4b	3p	4e	4f	4a
9	k	x	⌚	⚡	L3	L2	L1	⚡
10	W	A-lags-V	Hz	Ω	R	A	V	Hr
11	PF	%	THD	Auto	⦿	Min	MAX	Hr.
12	x	x	x	x	x	x	x	x
13	x	x	x	x	x	x	x	x
14	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x
16	x	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x	x
18	x	x	x	x	x	x	x	x
19	x	x	x	x	x	x	x	x
20	x	x	x	x	x	x	x	x

1: On

0: Off

x: Don't care

Example: While LCD reading is "3-phase, 127.5kW with PF= 0.75 and A-lags-V", 20 data bytes are "D7H, 59H, E3H, 20H, 50H, B5H, 51H, EBH, 80H, C0H, 80H, xxH, xxH, xxH, xxH, xxH, xxH, xxH, xxH, xxH, xxH"



Byte no.	HEX	bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
1	D7H	1	1	0	1	0	1	1	1
2	59H	0	1	0	1	1	0	0	1
3	E3H	1	1	1	0	0	0	1	1
4	20H	0	0	1	0	0	0	0	0
5	50H	0	1	0	1	0	0	0	0
6	B5H	1	0	1	1	0	1	0	1
7	51H	0	1	0	1	0	0	0	1
8	EBH	1	1	1	0	1	0	1	1
9	80H	1	x	0	0	0	0	0	0
10	C0H	1	1	0	0	0	0	0	0
11	80H	1	0	0	0	0	0	0	0
12	xxH	x	x	x	x	x	x	x	x
13	xxH	x	x	x	x	x	x	x	x
14	xxH	x	x	x	x	x	x	x	x
15	xxH	x	x	x	x	x	x	x	x
16	xxH	x	x	x	x	x	x	x	x
17	xxH	x	x	x	x	x	x	x	x
18	xxH	x	x	x	x	x	x	x	x
19	xxH	x	x	x	x	x	x	x	x
20	xxH	x	x	x	x	x	x	x	x