

UART Communication Function (U version only)

MEAN WELL Power Supply series LAD

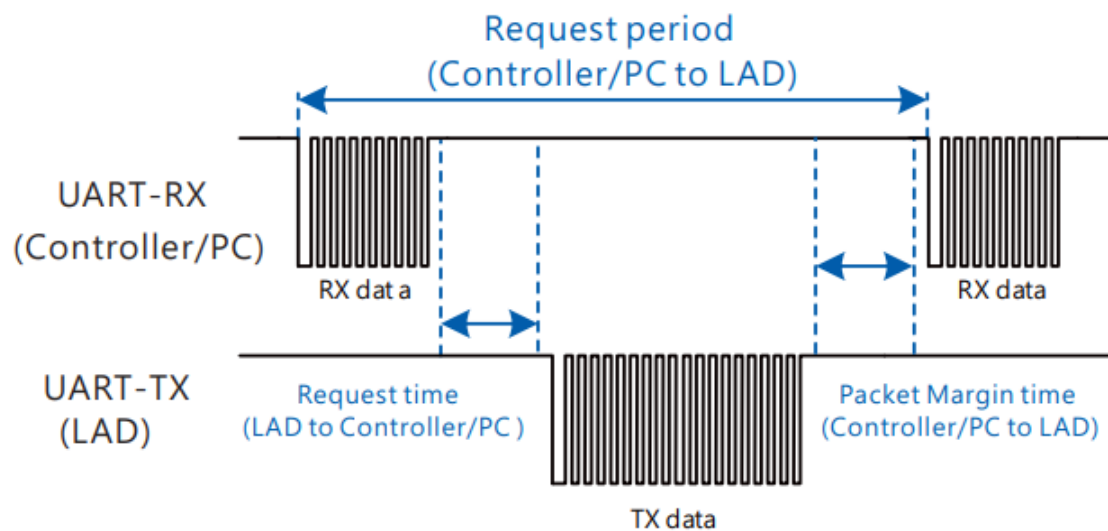
The various fault signals, power supply working status, single LAD battery voltage, main voltage, output voltage and output current to the controller through the UART, and changes the power supply working status according to the controller instructions.

Communication timing

Minimum request period (Controller/PC to LAD): 20mSec.

Maximum response time (LAD to Controller/PC to LAD): 5mSec.

Minimum packet interval time (Controller/PC to LAD): 5mSec.



Definition of data types

Data type	Narrate	Bytes	Range
U1	Unsigned char	1	0 ~ 255
U2	unsigned integer	2	0 ~ 65535
S1	signed char	1	-128 ~ 127
S2	Signed integer	2	-32768 ~ 32767

Definition description

Name	Narrate	Range
R/W byte	R/W decision bit	1. Read data (0x55) 2. Write data (0xAA)
Data length	The bit is determined	1 byte
Data address bytes	The address of the data to be transmitted	2 bytes
Data bytes	The content of the data to be transmitted	Calculated by actual bytes
CRC-8	Transmits a data error code (R/W byte ~ Data bytes).	1 byte

Instructions for Transmitting Data

Data is transferred in packets, reducing transfer time and avoiding excessive data processing.

	The user reads and writes the set bit	Data address range	Address used	Note
Controller/PC to LAD	0x55、 0xAA	0x0001~0xFFFF	0x0010~0x0060	1. 0x55 is used for reading LAD parameters 2. 0xAA for writing to the LAD parameter configuration
LAD to controller/PC	0x55	0x0001~0xFFFF 0	0x0010~0x0060	1. Transmit the required packets according to the user's sending the user's sending address

Controller/PC to LAD datasheet

R/W Byte	Data address bytes	The data name	narrate	Numeric range	Data Type	unit
0x55	0x0010	LAD status	LAD status flag read instruction	-	U1	-
	0x0020	Principal electrical voltage	Input voltage read instructions	0 ~ 65535	U2	-
	0x0030	Load current	Load current read instruction	0 ~ 65535	U2	-
	0x0040	Battery voltage	The total voltage of the battery series reads the instruction	0 ~ 65535	U2	-
	0x0050	Single cell battery voltage	Single-cell battery voltage read instruction	0 ~ 65535	U2	-
	0x0060	Battery undervoltage protection point	Battery UDP point read instructions	0 ~ 65535	U2	-
0xAA	0x0010	Standby excision instructions	Backup removal control	-	U1	-
	0x0020	Battery undervoltage protection point	Battery UTP point setting	0 ~ 65535	U2	0.01V
	0x0030	Buzzer control	Battery UTP point setting	-	U1	-
	0x0040	Standby enable command	The main standby power is normal when the communication enables the power backup control command		U1	-

LAD to Controller/PC data sheet

R/W Byte	Data address bytes	The data name	narrate	Numeric range	The length of the data	unit
0x55	0x0010	LAD status	LAD status flag	Instructions for transmitting data	4 bytes	-
	0x0020	Principal electrical voltage	Input voltage	0~65535	2 bytes	0.1V
	0x0030	Load current	Load current	0~65535	2 bytes	0.01A
	0x0040	Battery voltage	Total battery series voltage	0~65536	2 bytes	0.01V
	0x0050	Single cell battery voltage	Single cell battery voltage	0~65536	8 bytes	0.01V
	0x0060	Battery undervoltage protection point	Battery ULP point read	0~65536	2 bytes	0.00

Connector Pin No. Assignment (CN2) (LAD-600xU)

Pin no.	Assignment	Mating Housing	Terminal
1,2	Short: forced start	TKP DH2 Or equivalent	TKP DHT-1S (LF) Or equivalent
	Open: Normal		
3,4	Short: Remote UPS control		
	Open: normal		
5,6	Short: Li-ion batteries		
	Open: Lead-acid (Pb) batteries		
7,8	Fire alarm/ Evacuation option		
9	BAT1		
10	BAT2		
11	NC		
12	BAT3		
13	UART_RX		
14	UART_TX		
15	GND		
16	3.3V		

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Zdroj: <https://www.meanwell.com/webapp/product/search.aspx?prod=LAD-600&pdf=TEFELUUucGRm&a=4>