COMMUNICATION PROTOCOL

FOR MPPT CHARGER CONTROLLER

Protocol:		
Author:		
File name:		
Version:	00A 18/03/2013	**ORINGINAL RELEASE**

- Introduction

The communication protocol is a half-duplex protocol where the PC is the master and the MPPT is the slave; only the PC can send to the MPPT a request message : the MPPT can only send back a response message.

- Default communication setting

The default communication setting is : **2400 baud, 8 bits, NO PARITY, 1 stop bit**

NOTE

1. Computer will control information exchange by a query followed by <cr>.
2. Computer and DEVICE Inverter respond both the "<cr>" as the end of a response.
3. DEVICE Inverter responds with "(" start, and with one space separate the data.

1 Inquiry Command

1.1 Q1<cr>: Device general status parameters inquiry

Computer：Q1<cr>

Device: (AAA.A BB.BB CC.C DD.D EE.E FF.F GGG.G HHH.H)<cr>

	Data	Description	Notes
	(	Start byte	
a	AAA.A	PV voltage	A is an Integer number 0 to 9. The units is V.
b	BB.BB	Battery voltage	B is an Integer number 0 to 9. The units is V.
c	CC.C	Load current	C is an Integer number 0 to 9. The units is A.
d	DD.D	Charging current	D is an Integer number 0 to 9. The units is A.
e	EE.E	-	Reserved
f	FF.F	-	Reserved
g	GGG.G	-	Reserved
h	HHH.H	-	Reserved

2 Control Command

2.1 CVVnn.n<cr>: Setting bulk charging voltage

Computer: CVVnn.n<cr> n is an Integer number 0 to 9. The unit is V.

Device:(ACK<cr> If device accepts this command, otherwise ,responds (NAK<cr>

2.2 FLVnn.n<cr>: Setting floating charging voltage

Computer: FLVnn.n<cr> n is an Integer number 0 to 9. The unit is V.

Device:(ACK<cr> If device accepts this command, otherwise ,responds (NAK<cr>

2.3 LCA±XX<cr>:Load current calibration

Computer: LCAXX<cr>

XX is integer number from 0 to 20. The bigger XX is, the more reading load current changes. “+” means you want increase the detection value, while “-“ means to decrease the detection value.

Device: (ACK<cr> If device accepts this command, otherwise, responds (NAK<cr>

2.4 SCA±XX<cr>:Charging current calibration

Computer: SCAXX<cr>

XX is integer number from 0 to 20. The bigger XX is, the more reading load current changes. “+” means you want increase the detection value, while “-“ means to decrease the detection value.

Device:(ACK<cr> If device accepts this command, otherwise ,responds (NAK<cr>