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AC PnC Module
Model No.: AT-SECC-605A

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1 OVERVIEW

The **AT-SECC-605A** is a Supply Equipment Charging Communication Controller (SECC) specifically designed for **AC** Electric Vehicle Supply Equipment (EVSE), fully compliant with the ISO 15118 international standard. As a critical component of the Combined Charging System (CCS) on the EVSE side, it facilitates high-level AC charging communication with the electric vehicles, ensuring seamless interoperability and reliable performance.

Figure 1: Image of AT-SECC-605A Product

1.1 Features

- HomePlug Green PHY™ 1.1(IEEE 1901)
- ISO 15118-2 AC Parts
- Backend Connectivity: RS232

2 INTERFACE

Figure 2: Interfaces of AT-SECC-605A Product

2.1 JP1 Connector

Pin	Name	Description
1	DC+	12VDC Power Supply, input
2	GND	Power GND
3	/	Reserved
4	/	Reserved
5	DBG_RS232_TX	Debug, RS232 Data Transmitter
6	DBG_RS232_RX	Debug, RS232 Data Receiver
7	GND	Digital Ground
8	GND	Digital Ground
9	COM_RS232_TX	**Charging Communication**, RS232 Data Transmitter
10	COM_RS232_RX	**Charging Communication**, RS232 Data Receiver
11	GND	Digital Ground
12	GND	Digital Ground

2.2 JP2 Connector

Pin	Name	Description
1	PE_OUT	Protect Earth, from charging cable.
2	CP_OUT	PLC Control Pilot Output

3	CP_IN	PLC Control Pilot Input
4	PE_IN	Protect Earth, Input, from charging cable.

2.3 JP3 Connector

Pin	Name	Description
1	ETH	Reserved, Ethernet for Charging Communication, 10/100M

3 MECHANICAL DIMENSIONS

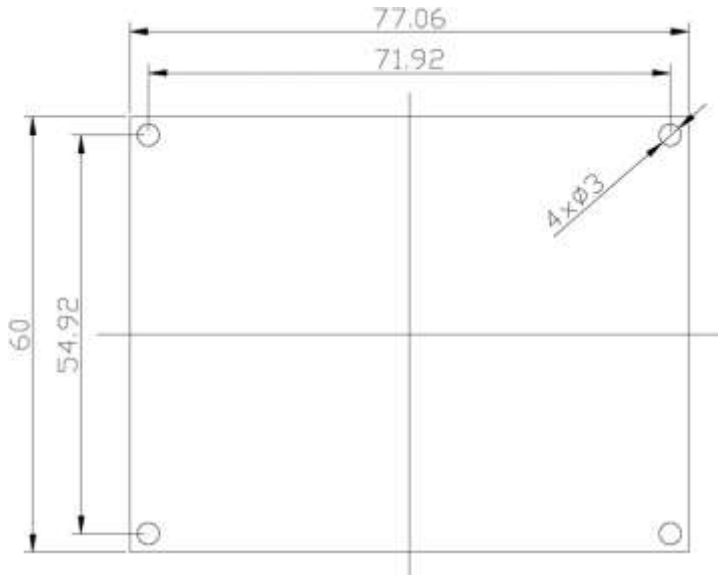

Figure 3: AT-SECC-605A product Dimensions

Notes:

1. All dimensions are in mm.

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4 ELECTRICAL CHARACTERISTICS

4.1 Recommended operating condition

SUPPLY PARAMETER	MIN	TYP	MAX	UNIT
DC supply voltage	+9	+12	+16	V

4.2 Physical Feature

Feature	Description	
Operation Temperature	-20ºC …. +55 ºC	
Dimensions (L*W*H)	77mm*60mm*19mm	
Protection Class	Housing IP40	
Assembly	PCB mounted	
Header and Connectors	JP1	PCB Header: Molex 501645-1220, 12pin.
		Connector: Molex 501646-1000, 12pin.
	JP2	PCB Header: KF2EDGV-Y-3.81mm-04P
		Connector: KF2EDG-Y-3.81mm-04P
	JP3	RJ45 Ethernet Connector

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5 APPLICATION EXAMPLE

5.1 Wiring with External AC Charger Board

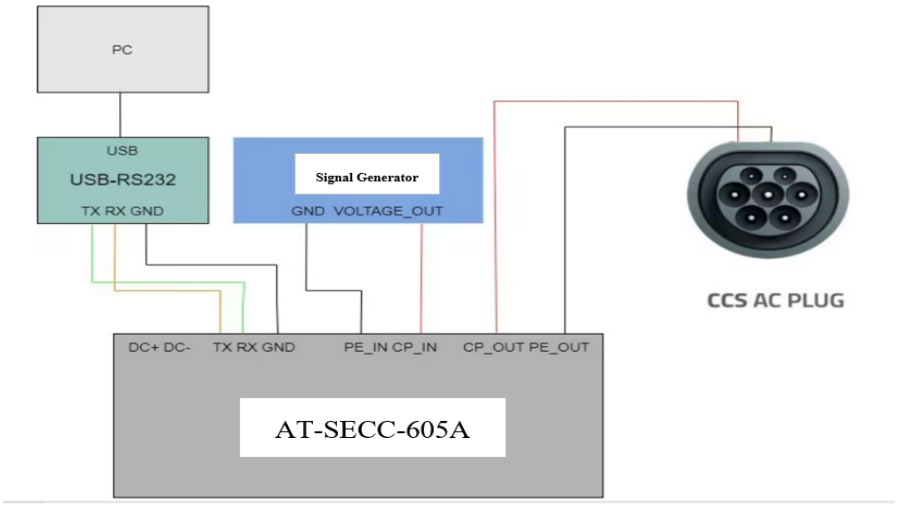

Figure 4: Wiring with External AC Charger Board/Controller

Note:

- The IEC 61851-1 Functionality is enabled in External AC Charger Board or CCU.

- The RS232 interface is the main communication way between DB-SECC-AC-605A and Charger Board. For detailed communication protocol documents, please contact ANNREN Technologies Co., Ltd..

6 ORDER INFORMATION

Order Code	HW	SW
AT-SECC-605A	1.0	ISO15118 AC