

User Guide For CT Series

1. Features

- Supports PAE and PEK Series Programmable power supplies (not PAK Series)
- Support max. 8 unit serial or parallel control function
- Support RS232/485 protocol
- Easy installation for serial or parallel control.

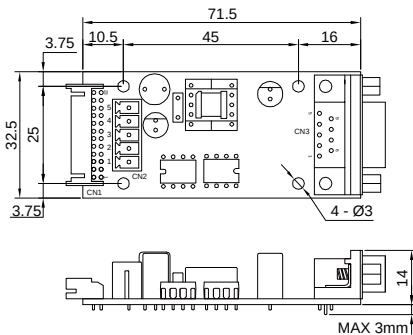
2. Specification

- Input Voltage: 5Vdc
- Operating Temperature Range: -10°C ~ 60°C
- Storage Temperature Range: - 30°C ~ 70°C
- Baud rate: 4800, N, 8, 1
- Connector: DB-9F fo RS232, RJ-11 (6P4C) for RS485
- Optical Isolation: I/P - O/P: 2500Vac rms for 1 minute

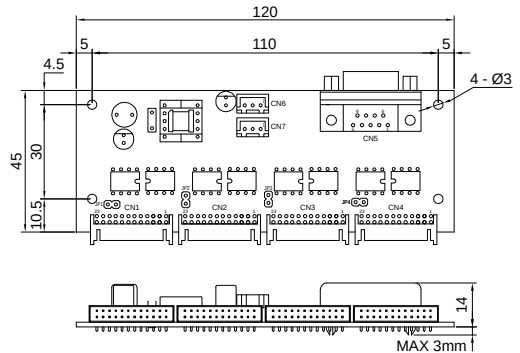
3. Mechanical dimension

Unit: mm

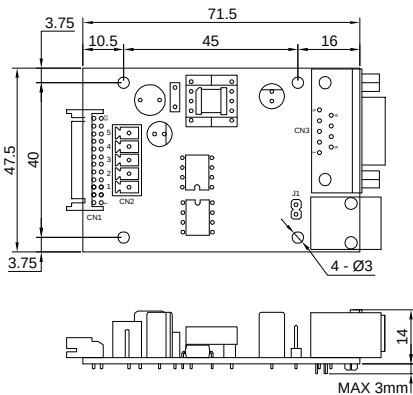
MODEL: CT-201



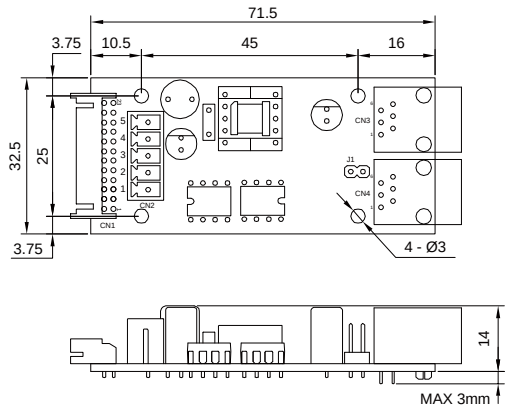
MODEL: CT-204



MODEL: CT-251



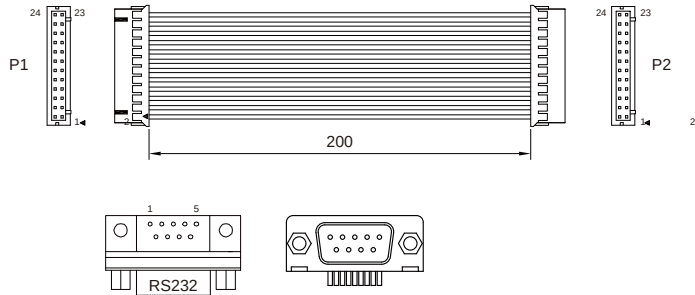
MODEL: CT-551



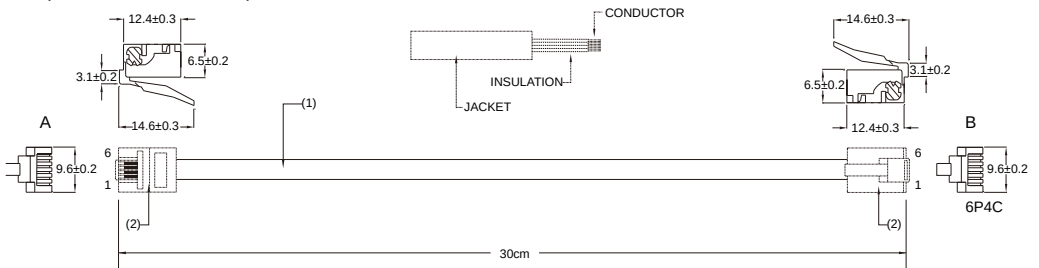
4. CT series cable drawing

- CT series cable
Part no.47-0124-0001)

Mating Housing / Contact	
JST PHDR-24VS or equivalent	JST SPHD-002T-P0.5 or equivalent



- CT parallel cable
(For CT-551Only)
(Part no. 47-0106-0003)



- CT-204 to CT-204 series cable (Optional)
Part no. (47-0103-0028)



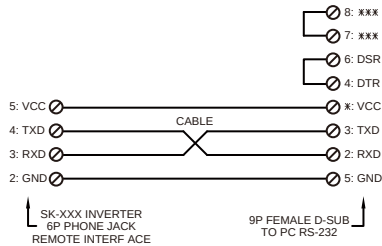
5. Accessories

Accessories MODEL	User Guide	CT series cable	CT parallel cable	EC350R-05P connector	CT-204 to CT-204 series cable
CT-201	1	1	---	1	---
CT-204	1	4	---	---	Optional
CT-251	1	1	---	1	---
CT-551	1	1	1	1	---

6. Pin assignment

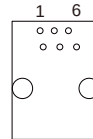
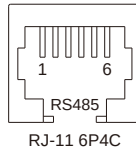
- DB-9F RS232 (only for CT-201/204/251)

1	NC
2	RxD
3	TxD
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC



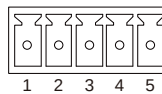
- RJ-11 6P4C RS485 (only for CT-251/551)

1	NC
2	GND
3	DATA +
4	DATA -
5	+5V
6	NC



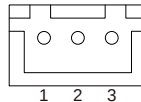
- ECH350V-05P DINKLE (only for CT-201/251/551)

1	GND
2	AUX
3	PAR
4	VS -
5	VS +



- B-XH-A 180°C (only for CT-204)

1	GND
2	RxD
3	TxD



- Control Pin connections: JST S24B-PHDSS or equivalent

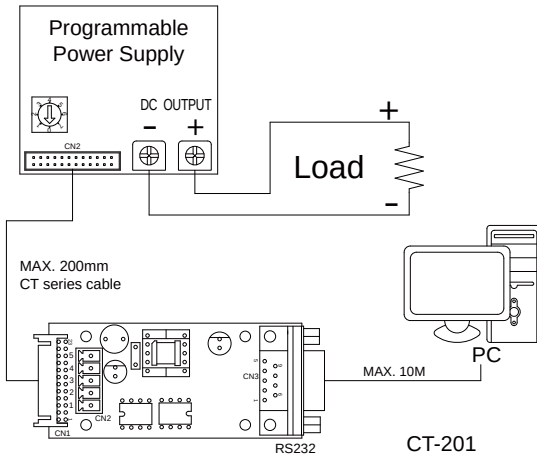
Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment
1	VS+	6	GND	11	EN+	16	GND	21	AUX
2	VO+	7	PAR	12	AUX	17	AUX	22	GND
3	VS-	8	VSET	13	ACI	18	GND	23	NC.
4	VO-	9	EN-	14	GND	19	SCL	24	NC.
5	POK	10	GND	15	VCI	20	SDA		

7. CT Series Quick Feature Guide

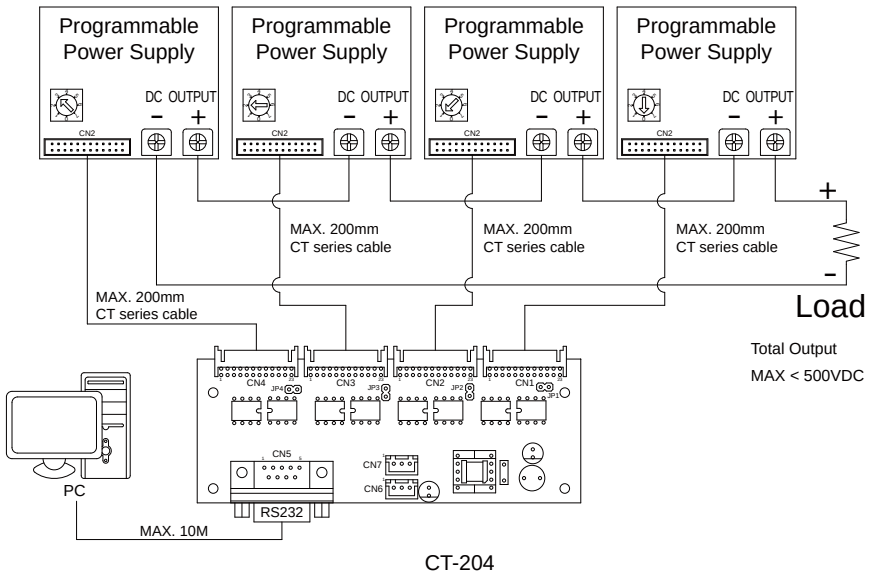
Function MODEL	Parallel / Remote sense	To Host	Power Connection	RS485 Expansion	RS232 Expansion
CT-201	✓	RS-232(DB-9F)	1 Unit	X	X
CT-204	X	RS-232(DB-9F)	4 Units	X	✓
CT-251	✓	RS-232(DB-9F)	1 Unit	✓	X
CT-551	✓	---	1 Unit	✓	X

8. Application Notes

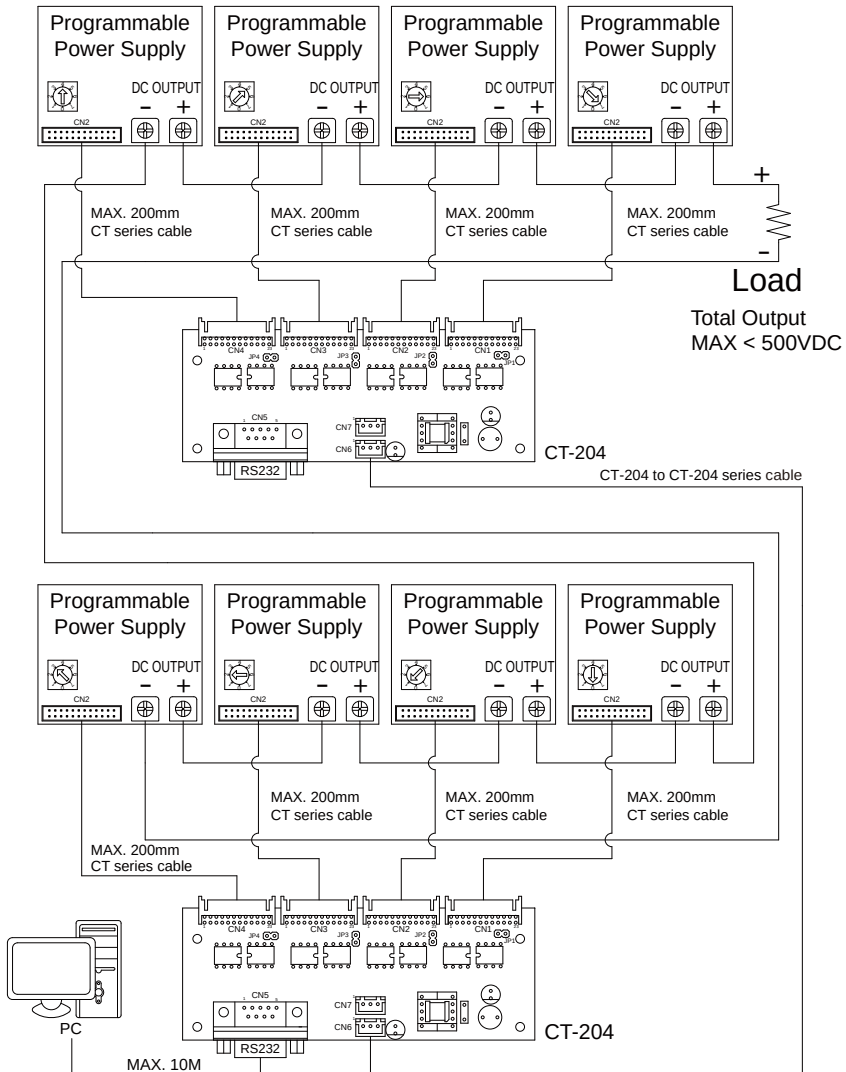
MODEL: CT-201



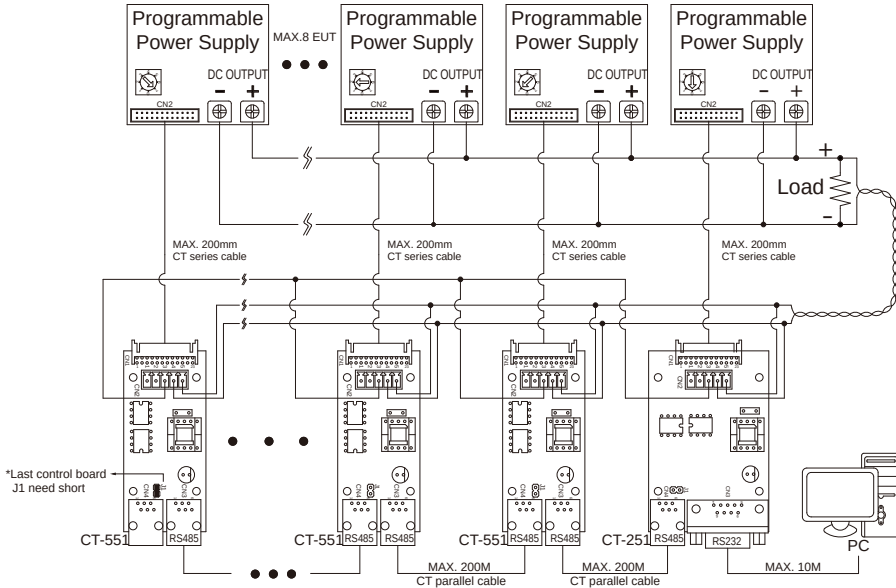
MODEL: CT-204 Series Control 4 EUT.



MODEL: CT-204 Series Control 8 EUT.



MODEL: CT-251 / 551 Parallel Control with Remote Sensing



Before using RS232/485 to control programmable SMPS, make sure to read the following notes:

1. Make sure the voltage and current setting has been correctly delivered to EUT before setting the command (Power <type>) to turn on / off the power supply. If OVP, or OLP LED signal has been activated due to incorrect operation, enter command POWER <type> will allow you to operate the EUT and setting command.
2. Every RS232/485 command character must be entered within 400ms, the ending point is judged by CR LF (0D0A), program will disregard the command if the command entering time exceeds 400ms per character.
3. After shut-down of the power of EUT, command setting will return to default, local mode.
4. After power on the EUT with command execution complete, EUT will switch to remote mode with orange LED signal status. For detail LED signal info, please refer to the EUT datasheet.
5. Please refer to the CT-xxx user manual (Page 02) for the cable spec. connect in between the CT-xxx controller board and EUT. Make sure to connect the cable as instructed on the user manual to avoid CT-xxx damage.
6. CT-xxx boards could support max. 8 units serial or parallel control function (ADD5 0-7). Before controlling the EUT, make sure the address is not in conflict with each other.
7. When controlling multiple EUT's, make sure to query the Address (ADD5 x) first before entering command to avoid EUT retrieving the incorrect value. If only single EUT, there is no need to query ADD5 before entering command.