

# Generation II 22/6TD Series Controller

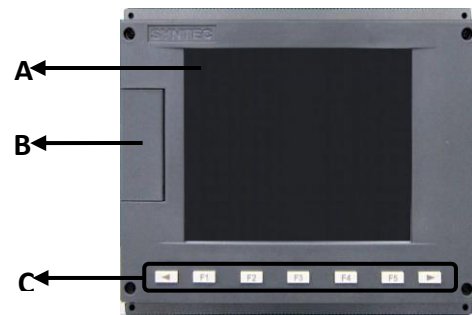
## Basic Installation Instructions v1.7

### 1. Applicable Series Controller:

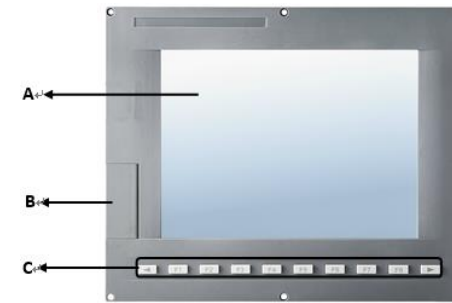
This manual is applicable for the following controllers of the series.

	Serial Number	Product Name
1	F01-22MA-STD	22MA Milling Controller_8-inch Standard Type
2	F01-22TA-STD	22TA Lathe Controller_8-inch Standard Type
3	F01-22B-STD	22TB Lathe Controller _8-inch Standard Type
4	F01-22MA-SEP	22MA Milling Controller _10-inch Split Type
5	F01-22MA-SEP-S	22MA Milling Controller _10-inch Flat Edge Split Type
6	F01-22MA-SEP-ST	22MA Milling Controller _10-inch Flat Edge Touch Panel Split Type
7	F01-22MA-10-STD	22MA Milling Controller _10-inch Standard Type
8	F01-22MA-15E	22MA Milling Controller _15-inch Frameless Split Type
9	F01-22MA-15-S	22MA Milling Controller _15-inch Flat Edge Split Type
10	F01-22MA-15-ST	22MA Milling Controller _15-inch Flat Edge Touch Panel Split Type
11	F01-22MA-8-SEP	22MA Milling Controller _8-inch Split Type
12	F01-22TA-SEP	22TA Lathe Controller _10-inch Split Type
13	F01-22TA-SEP-S	22TA Lathe Controller _10-inch Flat Edge Split Type
14	F01-22TA-SEP-ST	22TA Lathe Controller _10-inch Flat Edge Touch Panel Split Type
15	F01-22TA-10-STD	22TA Lathe Controller _10-inch Standard Type
16	F01-22TA-15E	22TA Milling Controller _15-inch Frameless Split Type
17	F01-22TA-15-S	22TA Lathe Controller _15-inch Flat Edge Split Type
18	F01-22TA-15-ST	22TA Lathe Controller _15-inch Flat Edge Touch Panel Split Type
19	F01-22TA-8-SEP	22TA Lathe Controller _8-inch Split Type
20	F01-22TB-SEP	22TB Lathe Controller _10-inch Split Type
21	F01-22TB-SEP-S	22TB Lathe Controller _10-inch Flat Edge Split Type
22	F01-22TB-SEP-ST	22TB Lathe Controller _10-inch Flat Edge Touch Panel Split Type
23	F01-22TB-10-STD	22TB Lathe Controller _10-inch Standard Type
24	F01-22TB-15E	22TB Lathe Controller _15-inch Frameless Split Type
25	F01-22TB-15-S	22TB Lathe Controller _15-inch Flat Edge Split Type
26	F01-22TB-15-ST	22TB Lathe Controller _15-inch Flat Edge Touch Panel Split Type
27	F01-22TB-8-SEP	22TB Lathe Controller _8-inch Split Type
28	F01-6TD-E-8-SEP	6TD-E Lathe Controller _8-inch Split Type
29	F01-6TD-E-STD	6TD-E Lathe Controller _8-inch Standard Type
30	F01-22MA-15SE	22MA Milling Controller _15-inch Narrow Boarder Split Type
31	F01-22TA-15SE	22TA Lathe Controller _15-inch Narrow Boarder Split Type
32	F01-22TB-15SE	22TB Lathe Controller _15-inch Narrow Boarder Split Type
33	F01-22MA-15SE-T	22MA Milling Controller_15-inch Touchscreen Narrow Bezel Separate

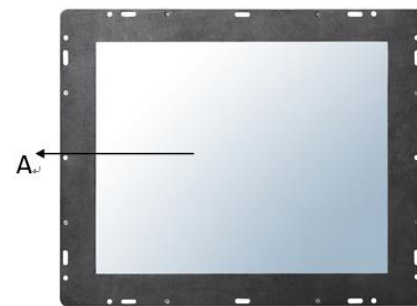
### 2. Interface Specifications (22/6TD Split Type Series 8-inch Controller) (Front View)



### (22 Series 10-inch Controller / Touch Panel Controller) (Front View)



### (22 Series 15-inch Frameless Controller) (22 Series 15-inch Flat Edge Controller) (Front View) (Front View)



### (22 Series 15-inch Narrow Boarder Split Type / Touch Panel Narrow Boarder Split Type Controller) (Front View)



### (22 Series 10-inch Flat Edge Split Type/ Touch Panel Controller) (Front View)



### (22 Series 10-inch Flat Edge Standard Type Controller) (Front View)

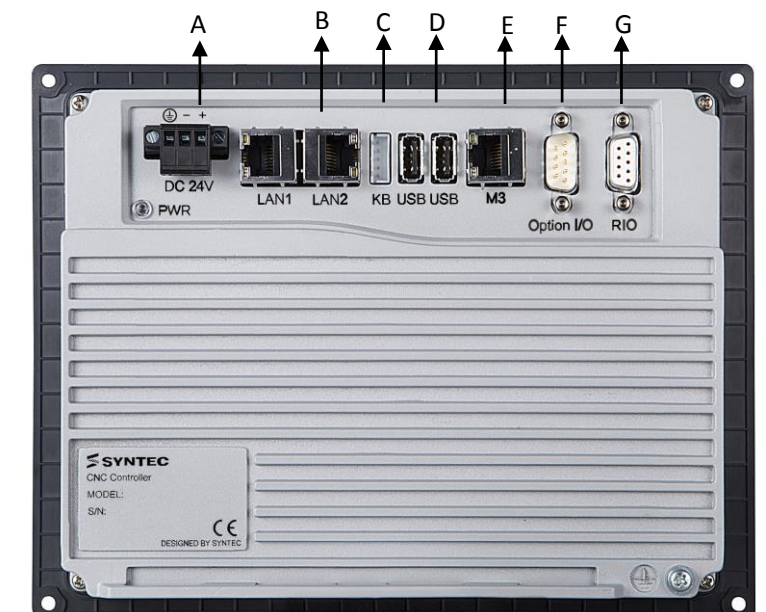


### (22/6TD Standard Type Series 8-inch Standard Type Controller) (Front View)



A	Monitor	Display Window
B	Flip Cover	USB Port (Do not charge mobile phones via the USB port of the controllers)
C	Buttons	Functions
D	Keypad	Script Input

### (Rear View)

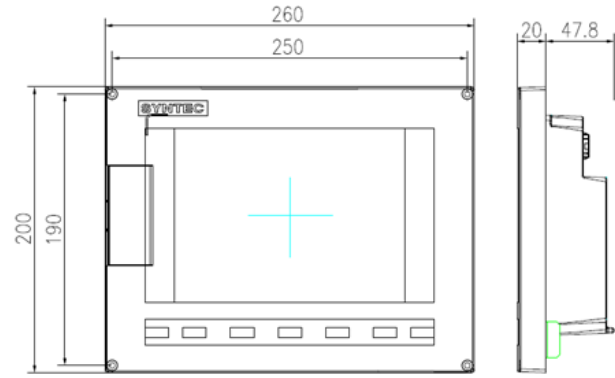


A	DC 24V INPUT	Power Input DC 24V(1A)
B	LAN1&2	2 sets of 10/100M Internet Interface
C	Keyboard	Keyboard Interface
D	USB	2 sets of USB2.0 Host (Do not charge mobile phones via the USB port of the controllers.)
E	Mechatrolink 3	M3 Serial Servo Communication Interface
F	Option I/O	A set of SRI and a set of RS485
G	RIO PORT	RIO interface, able to connect to asset of HKIO and a set of IO module.

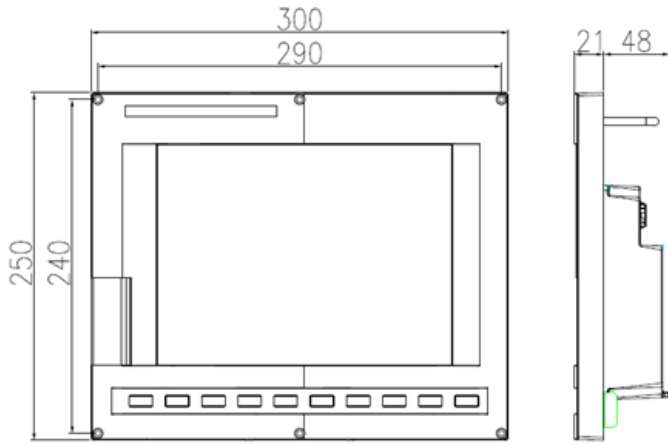
※Notice : To ensure communication quality, the length of USB extension cords in use shall not exceed five meters. Besides, do not charge or supply power via the USB port; otherwise, it may cause controller malfunction.

### 3. External Dimensions (Unit : mm)

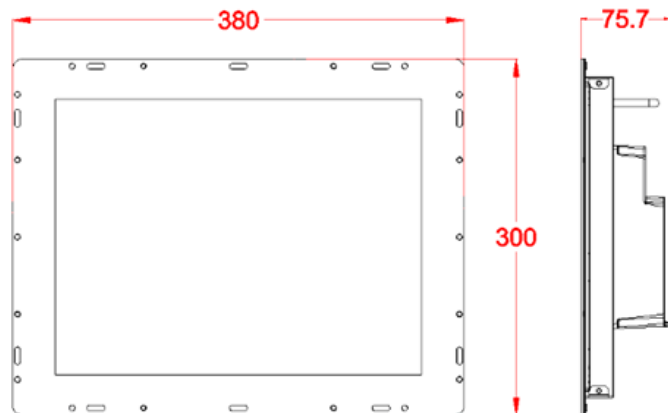
(22/6TD Split Type 8-inch Controller)



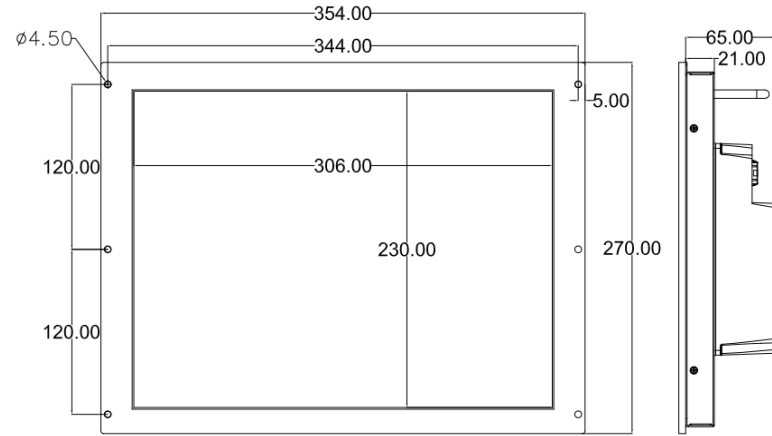
(22 Series 10-inch Controller/Touch Panel Controller)



(22 Series 15-inch Frameless Controller)

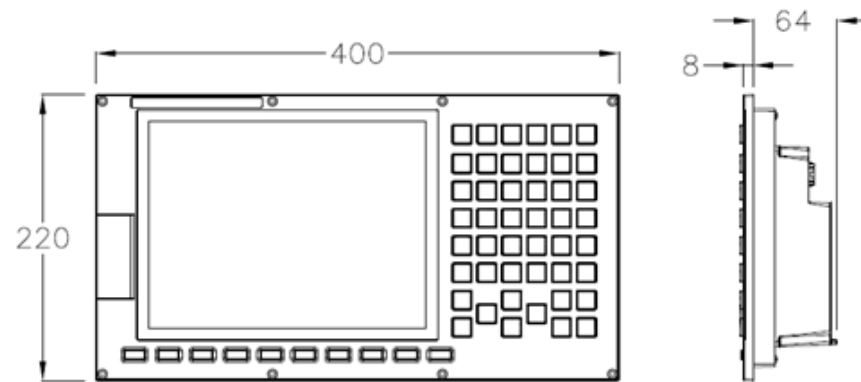


(22 Series 15-inch Narrow Boarder Split Type / Touch Panel Narrow Boarder Split Type Controller)

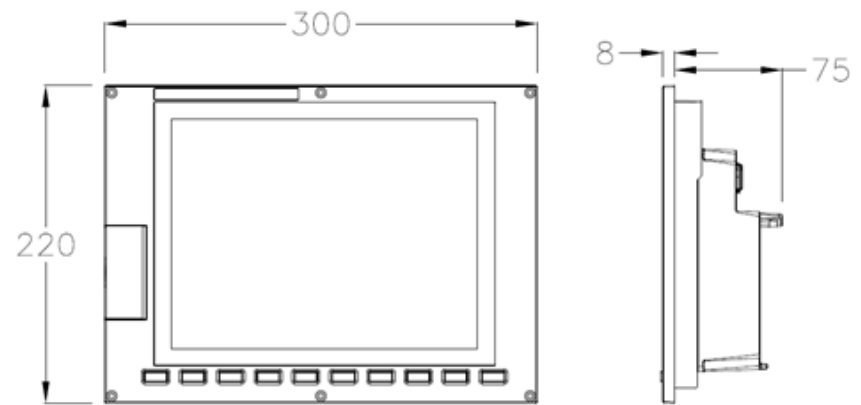


(22 Series 10-inch Flat Edge Standard Type Controller)

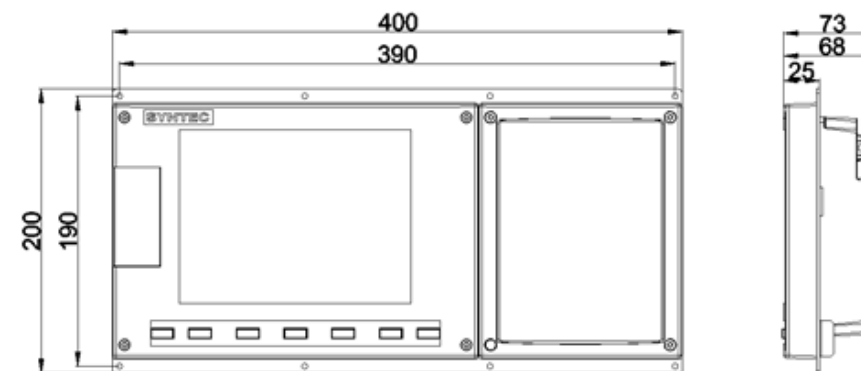
(Front View)



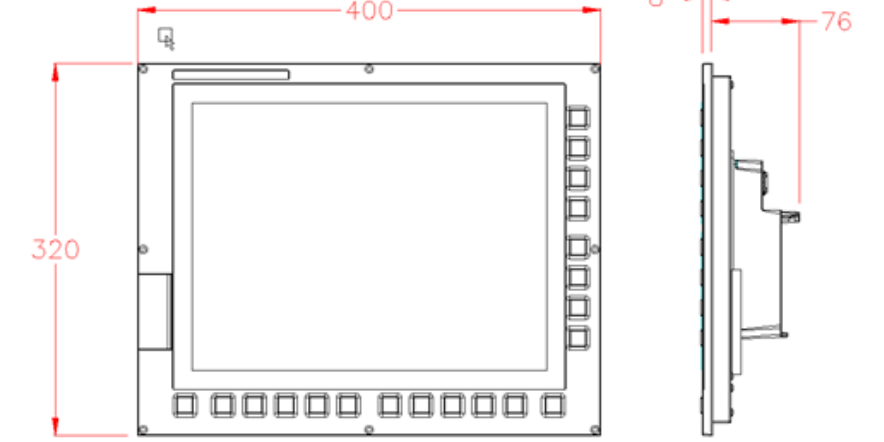
(22 Series 10-inch Flat Edge Split Type/ Touch Panel Controller)



(22/6TD Standard Type Series 8-inch Standard Type Controller)



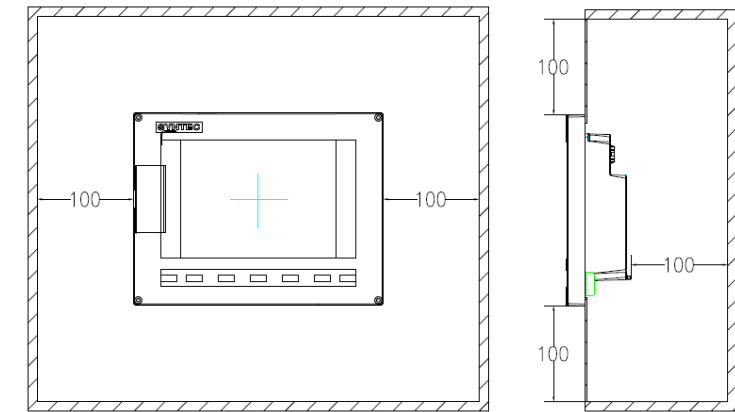
(22 Series 15-inch Flat Edge Controller)



### 4. Installation Specifications (Unit : mm)

(Front View)

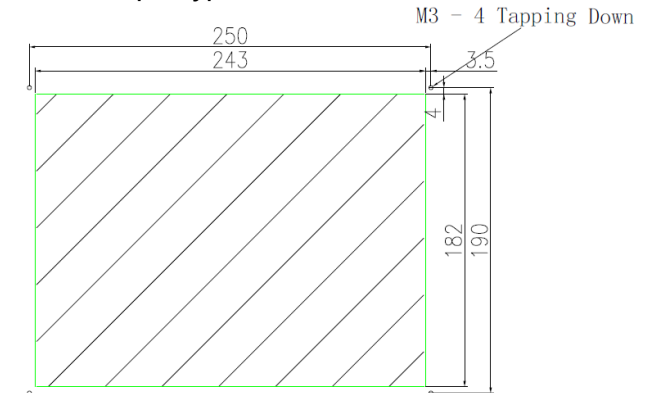
(Side View)



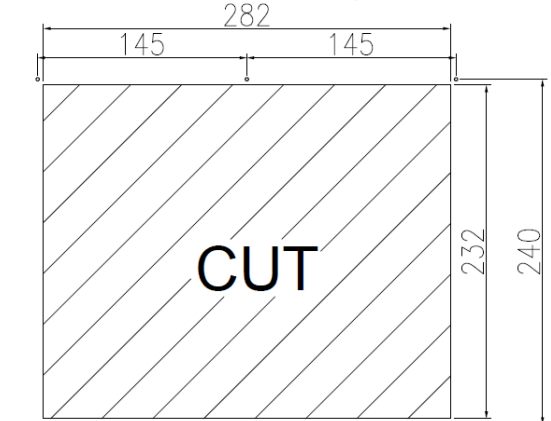
### 5. Mounting Hole Specifications (Unit : mm)

(Controller)

22/6TD Split Type Series 8-inch Controller

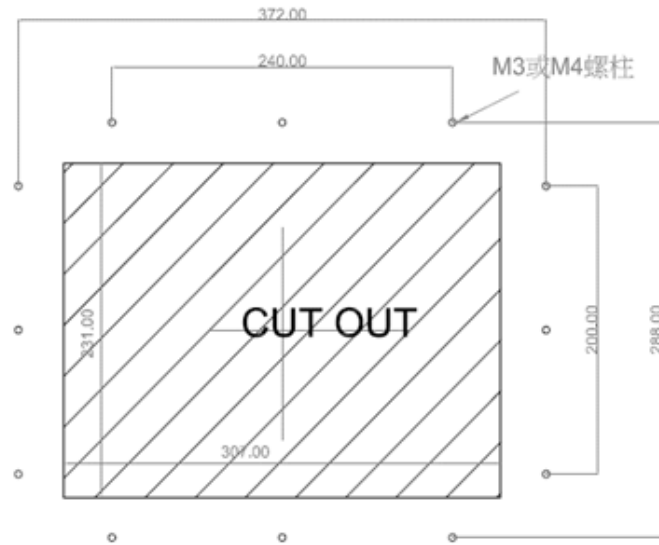


22 Series 10-inch Controller/Touch Panel Controller

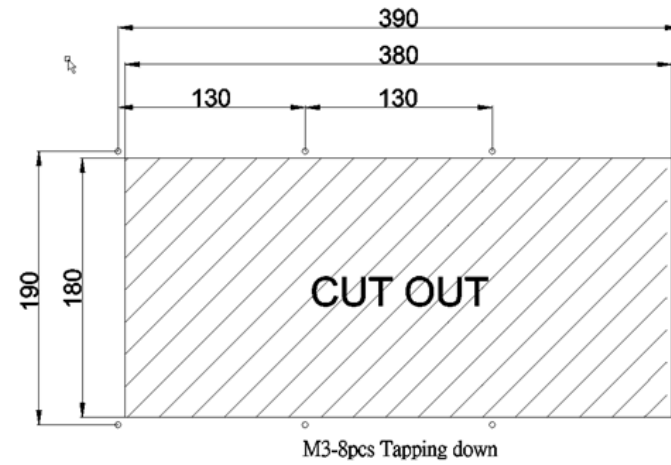


M3 - 6 Tapping Down

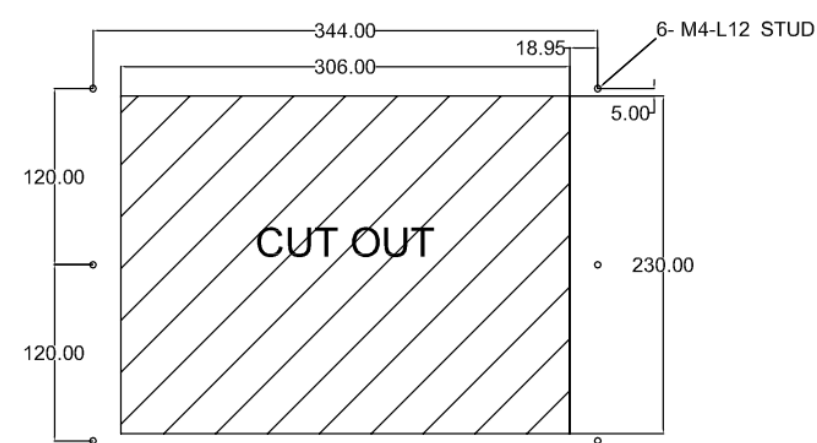
22 Series 15-inch Frameless Controller



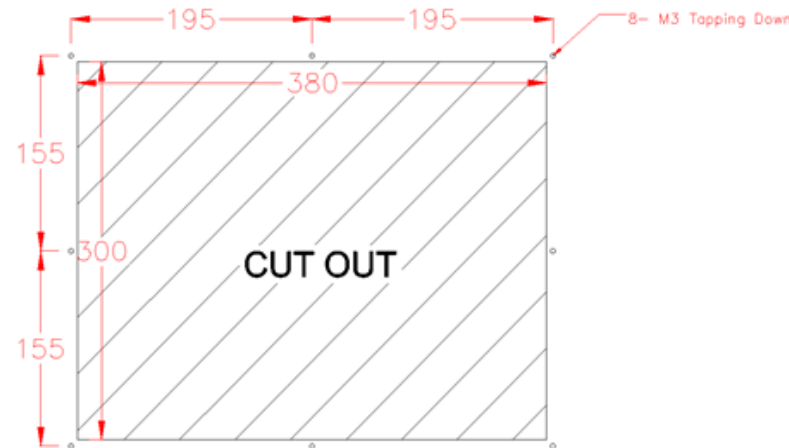
22/6TD Standard Type Series 8-inch Standard Type Controller



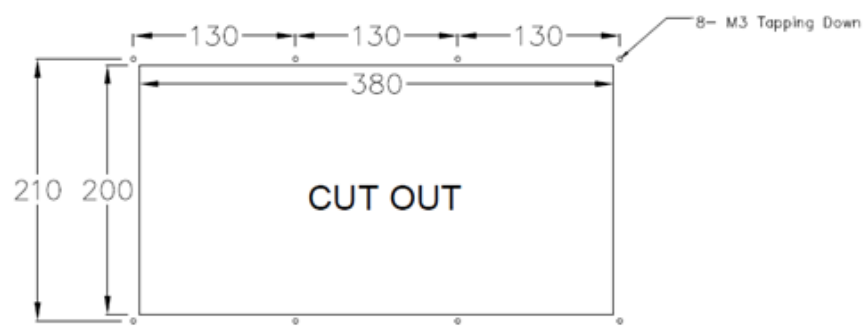
Touch Panel Narrow Boarder Split Type Controller



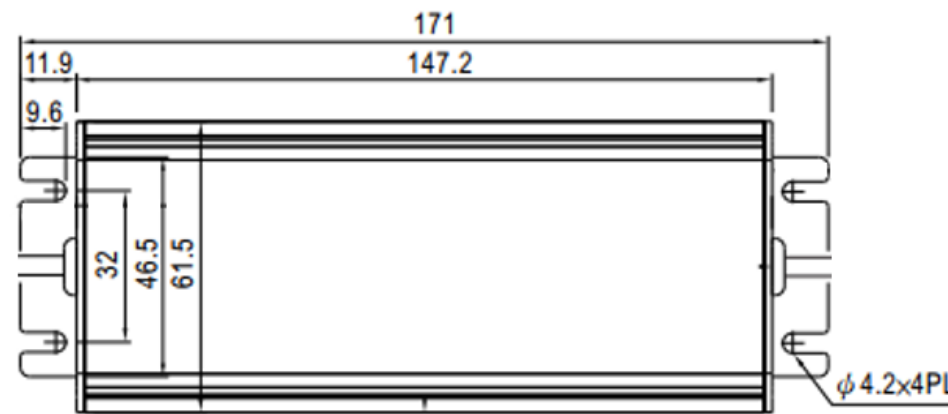
22 Series 15-inch Flat Edge Controller



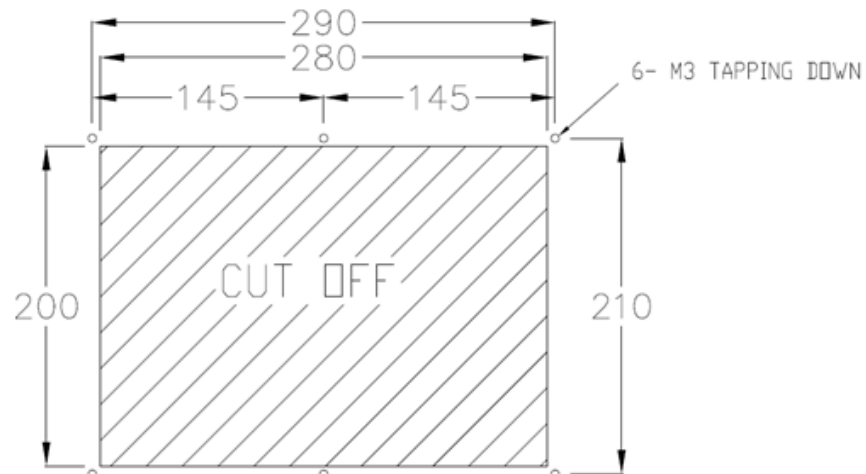
22 Series 10-inch Flat Edge Standard Type Controller



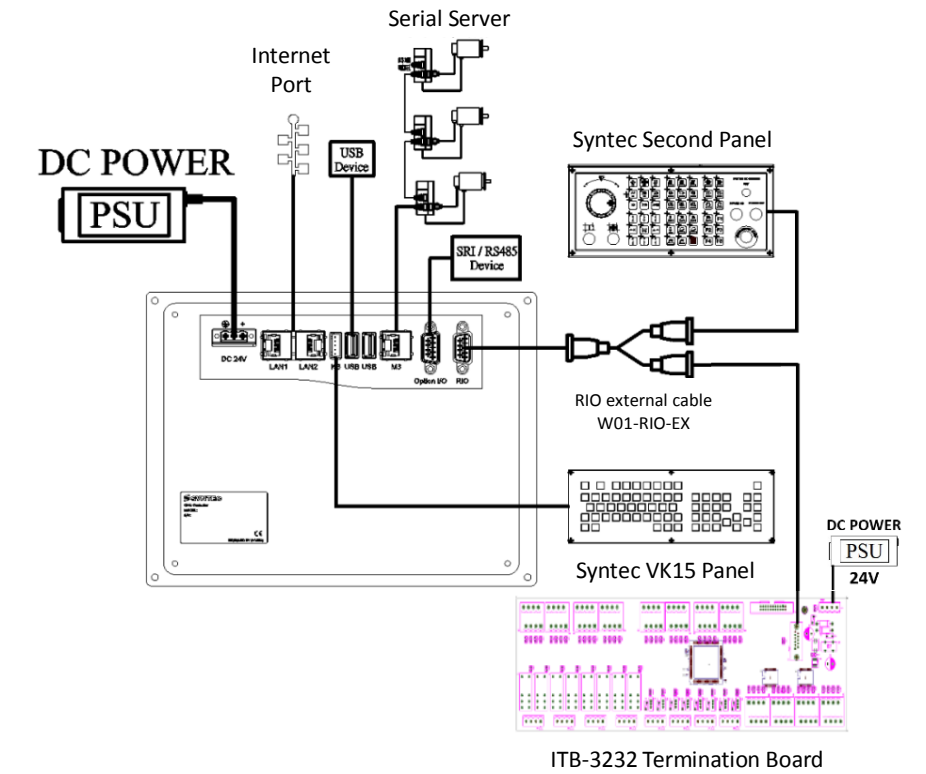
( Adapter )



22 Series 10-inch Flat Edge Split Type/ Touch Panel Controller



## 6. Basic Wiring Diagram

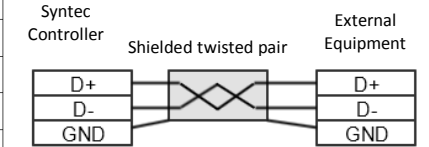


## 7. Interface Configurations

Please notice the value and polarities of voltages.

- Option I/O & SRI Connector Arrangement

SRI/Option I/O	PIN	SIGNAL	PIN	SIGNAL
	1	SRI D+	6	RS485_D-
	2	SRI D-	7	RS485_D+
	3	--	8	--
	4	--	9	5V
	5	GND	10	--



※Notice : Please apply shielded twisted pair when using the RS485 interface. Besides the D+ and D- signal cable, please make sure the air gap is connected to GND on both sides to prevent the RS485 interface from burning down.

- RIO Connector Arrangement

RIO	PIN	SIGNAL	PIN	SIGNAL
	1	RIO1-TX+	6	RIO2-TX+
	2	RIO1-TX-	7	RIO2-TX-
	3	RIO1-RX+	8	RIO2-RX+
	4	RIO1-RX-	9	RIO2-RX-
	5	--	10	--

- M3 Connector Arrangement

M3	PIN	SIGNAL
	1	TX+
	2	TX-
	3	RX+
	4	--
	5	--
	6	RX-
	7	--
	8	--

- LAN Connector Arrangement

LAN	PIN	SIGNAL
	1	TX+
	2	TX-
	3	RX+
	4	---
	5	---
	6	RX-
	7	---
	8	---