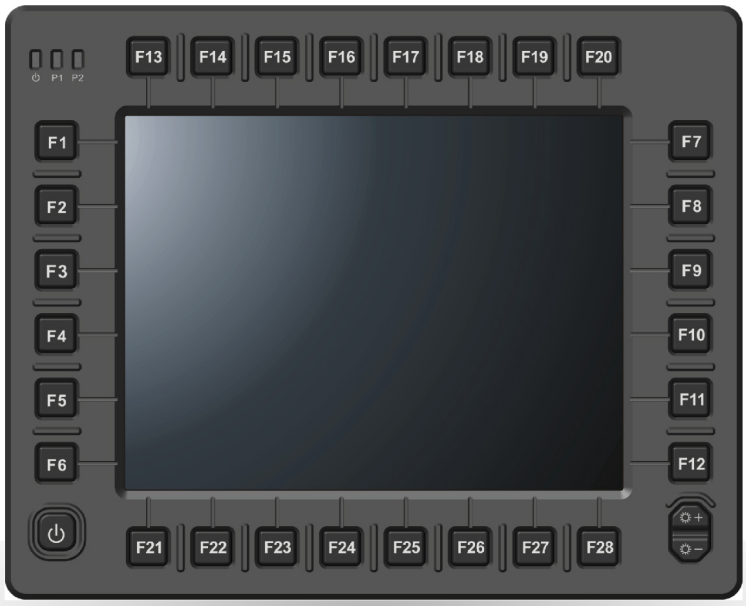
Military Panel PC
V10BBT1

User's Manual



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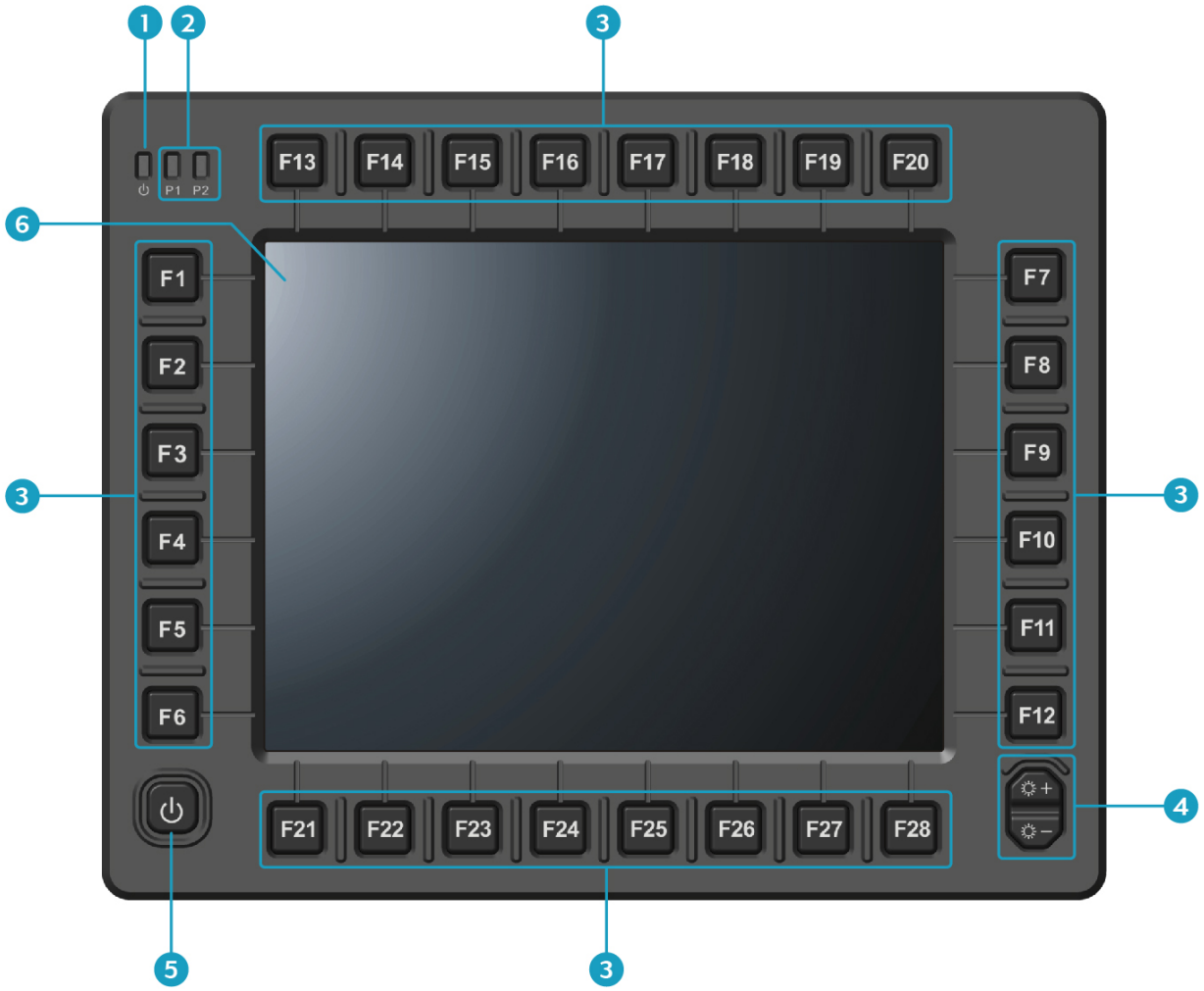
Product Overview

This section describes the main components of your device.

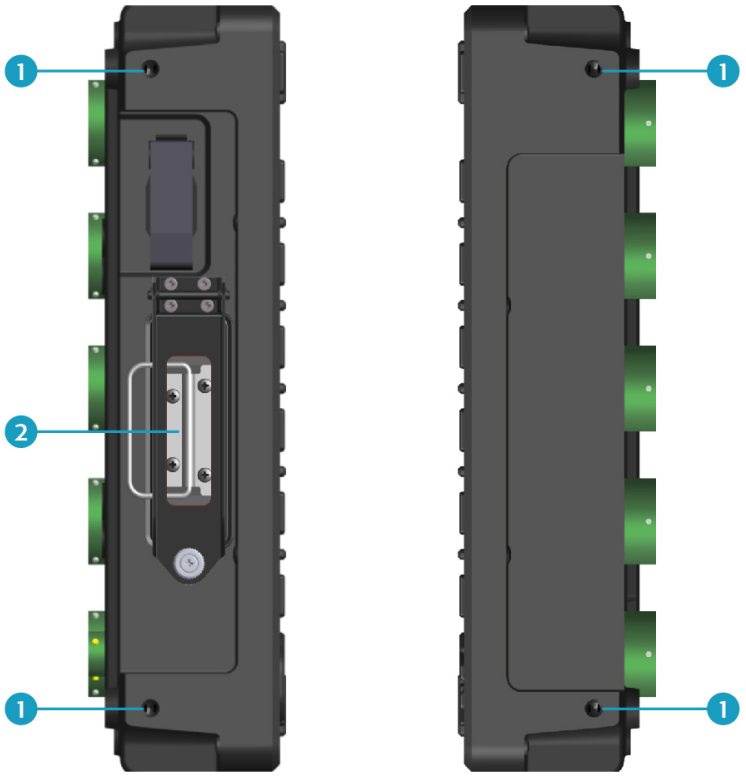
Front View



No.	Item	Description
1	Power LED	Indicate the power and heater status: • Green: the system is running (active). • Red: the heater is on before the system booting complete. • Orange: the heater is on while the system is active. • Off: the system is off. • Green (flashing): the system is suspending to RAM.

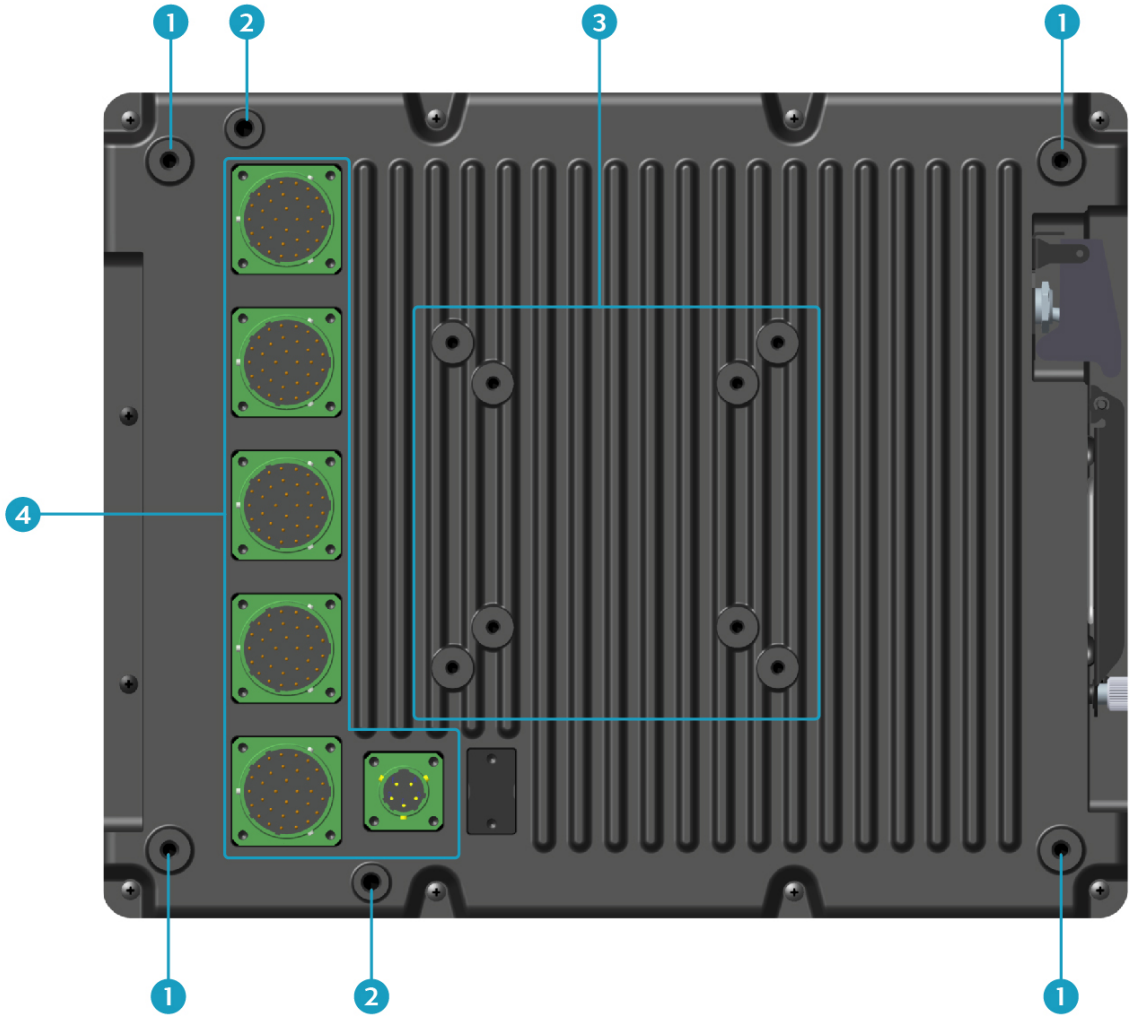
No.	Item	Description
2	Programmable LED (Warning LED)	Indicate the device status (user define).
3	Function buttons	Refer to the "Function Button Definitions" section on page 6~7.
4	Brightness buttons	Press +/- to adjust the brightness level.
5	Power button	Press to turn the device on/off.
6	Display screen	Allow users to use the Resistive Single Touch.

Left and Right Views



No.	Item	Description
1	Corner mounting holes	Attach the corner mount bracket (Thread type: M5x0.8P, Length: 15mm, Quantity: 4-on the left and right sides).
2	SSD door	Loosen the thumbscrew to open the SSD door, and then remove the SSD.

Back View



No.	Item	Description
1	Corner mounting holes	Attach the corner mount bracket (Thread type: M5x0.8P, Length: 15mm, Quantity: 4-on the back side).
2	Grounding receptacles	Install the ground screw/wire to ensure proper grounding connection (Thread type: M6x1P, Length: 14mm, Quantity: 2).
3	VESA mounting holes	Attach the VESA mount bracket (Thread type: M4x0.7P, Length: 8mm, Quantity: 8). **Note:** Support VESA mounting hole pattern of 75x75mm or 100x100mm.
4	Amphenol connectors	Refer to the "Pin Assignments" section on page 8~11.

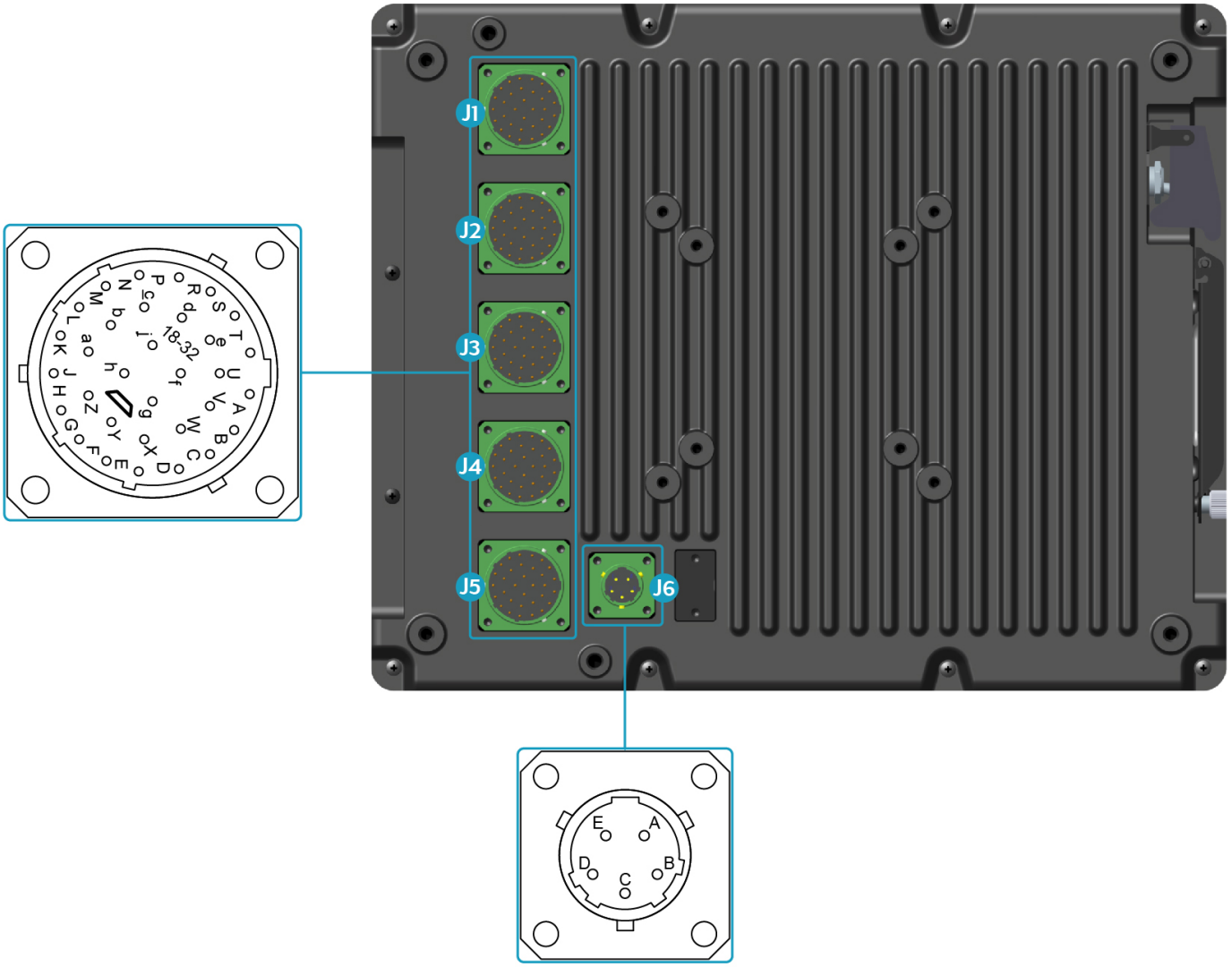
Function Button Definitions

The Function buttons work similar as any regular keyboard, with a few differences. To learn more about its respective function, refer to the table below:

Button	Description
F1	Press to emulate the ***F1*** key.
F2	Press to emulate the ***F2*** key.
F3	Press to emulate the ***F3*** key.
F4	Press to emulate the ***F4*** key.
F5	Press to emulate the ***F5*** key.
F6	Press to emulate the ***F6*** key.
F7	Press to emulate the ***F7*** key.
F8	Press to emulate the ***F8*** key.
F9	Press to emulate the ***F9*** key.
F10	Press to emulate the ***F10*** key.
F11	Press to emulate the ***F11*** key.
F12	Press to emulate the ***F12*** key.
F13	Press to emulate the ***Win*** (⊞) key.
F14	Press to emulate the ***Delete*** key.
F15	Press to emulate the ***Esc*** key.
F16	Press to emulate the ***Enter*** key.
F17	Press to emulate the **+** key.
F18	Press to emulate the **-** key.
F19	Press to turn on/off all function buttons (F1~F28) backlight.
F20	Press to enable/disable Night Vision mode (In Night Vision mode, LCD brightness is ≦1.7nits and all indicators and buttons LED are off).
F21	Press to emulate the ◀ (left arrow) key.

Button	Description
F22	Press to emulate the ▶ (right arrow) key.
F23	Press to emulate the ▲ (up arrow) key.
F24	Press to emulate the ▼ (down arrow) key.
F25	Press to emulate the ***Home*** key.
F26	Press to emulate the ***End*** key.
F27	Press to emulate the ***PageUp*** key.
F28	Press to emulate the ***PageDown*** key.

Pin Assignments



Amphenol connector pins numbering

Connector	V10BB System Connector Part No.	Mating Connector Part No. (Customer)
J1	AMPHENOL PT02A-18-32P	AMPHENOL PT06A-18-32S
J2	AMPHENOL PT02A-18-32PW	AMPHENOL PT06A-18-32SW
J3	AMPHENOL PT02A-18-32PX	AMPHENOL PT06A-18-32SX
J4	AMPHENOL PT02A-18-32PY	AMPHENOL PT06A-18-32SY
J5	AMPHENOL PT02A-18-32PZ	AMPHENOL PT06A-18-32SZ
J6	AMPHENOL PT02A-10-5P	AMPHENOL PT06A-10-5S

Note: COM mode can be configured according to customer's requirement (Factory option). The default setting is RS232.

Refer to the table below for the pinout with their relevant functions of Amphenol connectors.

J1 : PT02A-18-32P		
Pin No.	**Signal**	**Function**
A	DVI_VGA_RED	**VGA**
B	DVI_VGA_GREEN	
C	DVI_VGA_BLUE	
D	DVI_VGA_GND	
E	DVI_VGA_HSYNC	
F	DVI_VGA_VSYNC	
G	DVI_CON_DDC_CLK	
H	DVI_CON_DDC_DAT	
J	VCC5_DVI	**DVI-D**
K	DVI_DATA2	
L	DVI_DATA2#	
M	DVI_GND	
N	DVI_DATA1	
P	DVI_DATA1#	
R	DVI_GND	
S	DVI_DATA0	
T	DVI_DATA0#	
U	DVI_GND	
V	DVI_CLK	
W	DVI_CLK#	
X	DVI_GND	
Y	DVI_HPD	
Z	DVI_DDC_DAT	
a	DVI_DDC_CLK	
b	PAL1-	**PAL1**
c	PAL1+	
d	PAL2-	**PAL2**
e	PAL2+	
f	PAL3-	**PAL3**
g	PAL3+	
h	PAL4-	**PAL4**
j	PAL4+	

J2 : PT02A-18-32PW		
Pin No.	**Signal**	**Function**
A	USB3_VCC5	**USB3**
B	USB3_PN	
C	USB3_PP	
D	USB3_GND	
E	USB2_VCC5	**USB2**
F	USB2_PN	
G	USB2_PP	
H	USB2_GND	
J	USB0_VCC5	**USB0**
K	USB0_PN	
L	USB0_PP	
M	USB0_GND	
N	USB1_VCC5	**USB1**
P	USB1_PN	
R	USB1_PP	
S	USB1_GND	
T	GLAN1_MX0+	**GLAN1**
U	GLAN1_MX0-	
V	GLAN1_MX1+	
W	GLAN1_MX1-	
X	GLAN1_MX2+	
Y	GLAN1_MX2-	
Z	GLAN1_MX3+	
a	GLAN1_MX3-	
b	GLAN2_MX0+	**GLAN2**
c	GLAN2_MX0-	
d	GLAN2_MX1+	
e	GLAN2_MX1-	
f	GLAN2_MX2+	
g	GLAN2_MX2-	
h	GLAN2_MX3+	
j	GLAN2_MX3-	

J3 : PT02A-18-32PX				
Pin No.	Signal			Function
	RS-232	RS-485	RS-422	
A	COM1_GND	GND	GND	COM1
B	COM1_RI#			
C	COM1_DTR#		TX-	
D	COM1_CTS#			
E	COM1_SOUT		TX+	
F	COM1_RTS#			
G	COM1_SIN	D+ (A)	RX+	
H	COM1_DSR#			
J	COM1_DCD#	D- (B)	RX-	
K	COM2_GND	GND	GND	COM2
L	COM2_RI#			
M	COM2_DTR#		TX-	
N	COM2_CTS#			
P	COM2_SOUT		TX+	
R	COM2_RTS#			
S	COM2_SIN	D+ (A)	RX+	
T	COM2_DSR#			
U	COM2_DCD#	D- (B)	RX-	
V	COM3_GND	GND	GND	COM3
W	COM3_RI#			
X	COM3_DTR#		TX-	
Y	COM3_CTS#			
Z	COM3_SOUT		TX+	
a	COM3_RTS#			
b	COM3_SIN	D+ (A)	RX+	
c	COM3_DSR#			
d	COM3_DCD#	D- (B)	RX-	
e				
f				
g				
h				
j				

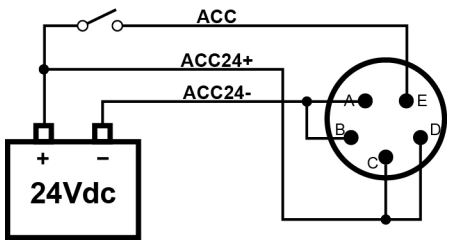
J4 : PT02A-18-32PY				
Pin No.	Signal			Function
	RS-232	RS-485	RS-422	
A	COM4_GND	GND	GND	COM4
B	COM4_RI#			
C	COM4_DTR#		TX-	
D	COM4_CTS#			
E	COM4_SOUT		TX+	
F	COM4_RTS#			
G	COM4_SIN	D+ (A)	RX+	
H	COM4_DSR#			
J	COM4_DCD#	D- (B)	RX-	
K	COM5_GND	GND	GND	COM5
L	COM5_RI#			
M	COM5_DTR#		TX-	
N	COM5_CTS#			
P	COM5_SOUT		TX+	
R	COM5_RTS#			
S	COM5_SIN	D+ (A)	RX+	
T	COM5_DSR#			
U	COM5_DCD#	D- (B)	RX-	
V	COM6_GND	GND	GND	COM6
W	COM6_RI#			
X	COM6_DTR#		TX-	
Y	COM6_CTS#			
Z	COM6_SOUT		TX+	
a	COM6_RTS#			
b	COM6_SIN	D+ (A)	RX+	
c	COM6_DSR#			
d	COM6_DCD#	D- (B)	RX-	
e				
f				
g				
h				
j				

J5 : PT02A-18-32PZ				
Pin No.	Signal			Function
	RS-232	RS-485	RS-422	
A	COM7_GND	GND	GND	COM7
B	COM7_RI#			
C	COM7_DTR#		TX-	
D	COM7_CTS#			
E	COM7_SOUT		TX+	
F	COM7_RTS#			
G	COM7_SIN	D+ (A)	RX+	
H	COM7_DSR#			
J	COM7_DCD#	D- (B)	RX-	
K	CB1_VBAT			CANBUS1
L	CB1_J1939+			
M	CB1_J1939-			
N	CB1_GND			
P	CB2_VBAT			CANBUS2
R	CB2_J1939+			
S	CB2_J1939-			
T	CB1_GND			

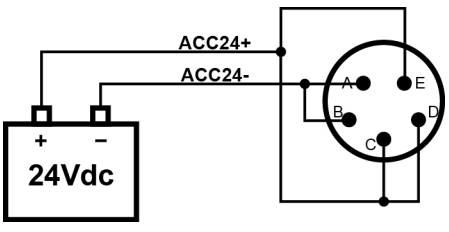
J5 : PT02A-18-32PZ				
Pin No.	Signal			Function
	RS-232	RS-485	RS-422	
U	EXT_GPI0			EXT GPI
V	EXT_GPI1			
W	EXT_GPI2			
X	EXT_GPI3			
Y	EXT_GPO0			EXT GPO
Z	EXT_GPO1			
a	EXT_GPO2			
b	EXT_GPO3			
c	EXT_GPIO_GND			EXT GPI/O
d	AUDIO_GND1			AUDIO
e	AUDIO_GND2			
f	LINE_OUT			
g	LINE_IN			
h	MIC_IN			
j	AUDIO_GND3			

J6 : PT02A-10-5P	
Pin No.	Signal
A	VCC24-
B	VCC24-
C	VCC24+
D	VCC24+
E	ACC

Power Cable Connection with ACC Control:



Power Cable Connection without ACC Control:



Note: ACC power on function can be configured according to customer's requirement (Factory option).