

SlimLine ES

quick install guide version 2.1

**TL Electronic GmbH
Bgm.-Gradl-Str. 1
85232 Bergkirchen-Feldgeding
Germany**

Telephone: +49 (0)8131 33204-0

Fax: +49 (0)8131 33204-150

E-Mail: info@tl-electronic.de

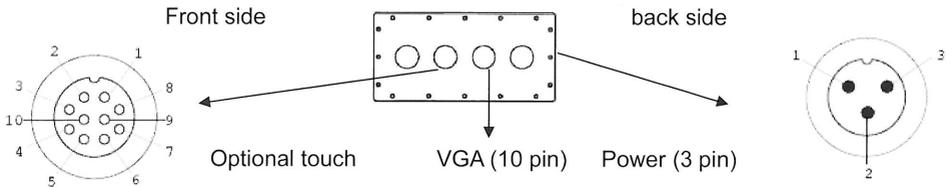
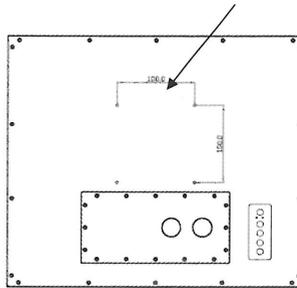
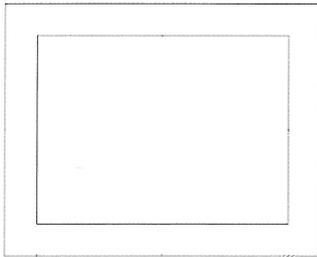
www.tl-electronic.de

*Perfect
Industrial IT* **TL** *electronic*

Quick Installation Guide of Full IP65/NEMA 4X LCD

Overview(LCD)

VESA standard (100*100)



Full IP65 MONITOR provides several IO in back side. One is power (3 pin) in the right side, others are VGA and optional touch interface (USB or RS232) in the left side. All connectors are IP65 level and fool-proofing design; it helps the end user to install correctly.

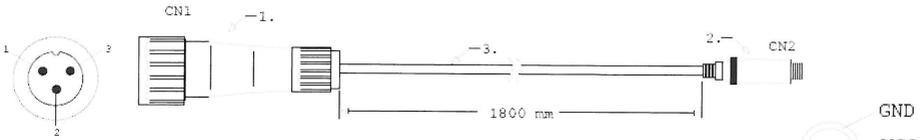
Cable List

VGA and power cable is standard, and USB/RS232 cable depends on the touch interface. All cables are 1.8 M with IP65- level connector in LCD side and standard IO in PC side.

LCD	IP65 connector	PC side IO type
DC power cord	3 pin	Female (2.5 fai)
USB(optional)	10 pin	Male
RS232(optional)	10 pin	Female(D-sub 9)
VGA	10 pin	Male(D-sub 15)

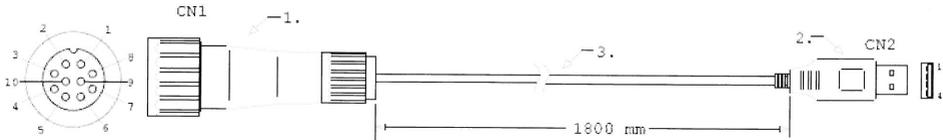
Cable drawing/pine defines

DC power



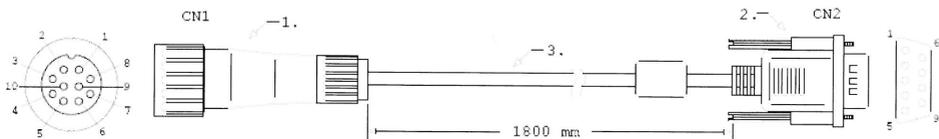
Pin No.	Symbols	Color	Pin No.	Symbols	Color
CN1-1	VCC	Red	CN2	VCC	Red
CN1-3	GND	Black	CN2	GND	Black
CN1-2	Shield			Shield	

USB



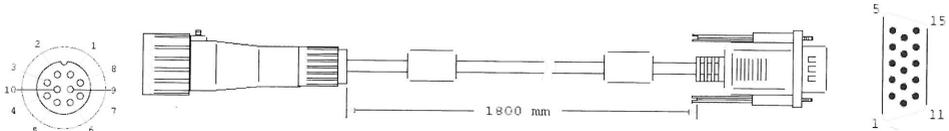
Pin No.	Symbols	Color	Pin No.	Symbols	Color
CN1-1	VCC	Red	CN2-1	VCC	Red
CN1-2	D-	WHITE	CN2-2	D-	WHITE
CN1-3	D+	Green	CN2-3	D+	Green
CN1-4	GND	Black	CN2-4	GND	Black
CN1-5	Shield				

RS232



Pin No.	Symbols	Color	Pin No.	Symbols	Color
CN1-1	DCD-CON2	Green	CN2-1	DCD-CON2	Green
CN1-2	DSR-CON2	Brown	CN2-6	DSR-CON2	Brown
CN1-3	RXD-CON2	Red	CN2-2	RXD-CON2	Red
CN1-4	RTS-CON2	Orange	CN2-7	RTS-CON2	Orange
CN1-5	TXD-CON2	Blue	CN2-3	TXD-CON2	Blue
CN1-6	CTS-CON2	White	CN2-8	CTS-CON2	White
CN1-7	DTR-CON2	Purple	CN2-4	DTR-CON2	Purple
CN1-8	RI-CON2	Yellow	CN2-9	RI-CON2	Yellow
CN1-9	GND-CON2	Black	CN2-5	GND-CON2	Black
CN1-10	NC		CN2-10	NC	

VGA



CN1				CN2		
Pin No.	Symbols	Color		Pin No.	Symbols	Color
1	R	Red	↔	1	R	Red
2	R-GND	Black	↔	6	R-GND	Black
3	G	Green	↔	2	G	Green
4	G-GND	Black	↔	7	G-GND	Black
5	B	Blue	↔	3	B	Blue
6	B-GND	Black	↔	8	B-GND	Black
7	SDA	Yellow	↔	12	SDA	Yellow
8	HS	Orange	↔	13	HS	Orange
9	VS	White	↔	14	VS	White
10	SCL	Brown	↔	15	SCL	Brown

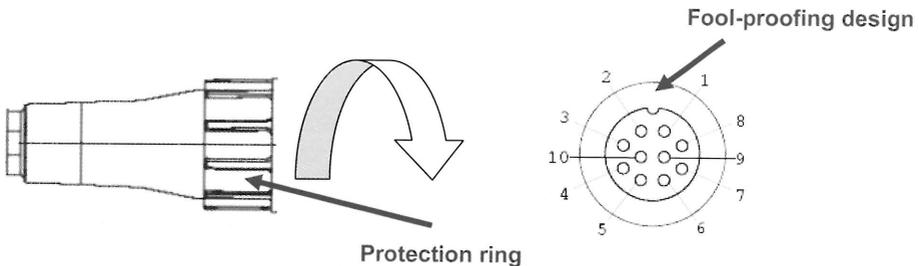
Installations

Step1. Open the covers on the connectors

All IO on the rear side of LCD is well protected with a plastic cover. Before installing the monitor, user needs to open it.

Step2. Power Cable Connection (3 pin)

The power cable is 3 pin IP65 connector design in LCD side. User need to plug in and make the cable fit the connector, then the O-ring on the cable will be squeezed as the protection ring is screwing clockwise.



Step3. VGA cable connection (only for LCD)

Connect the VGA cable to your PC. The VGA connector is 10 pin designs in LCD side, User need to plug in and make the cable fit the connector, and then the O-ring on the cable will be squeezed as the protection ring is screwing clockwise.

Step4. Touch interface (RS232/USB)

Connect touch interface to your PC, User need to plug in and make the cable fit the connector, and then the O-ring on the cable will be squeezed as the protection ring is screwing clockwise.

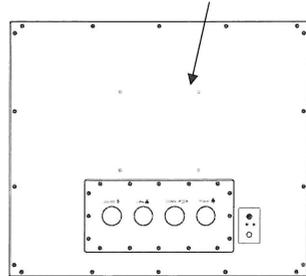
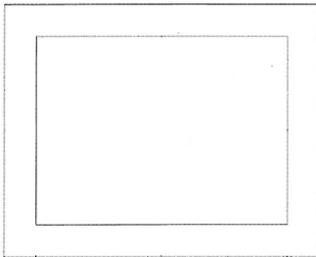
LCD Accessory list

VGA cable	1 PCS
Power cable	1 PCS
Touch cable (optional)	1 PCS
Adapter	1 PCS
Quick installation guide	1 PCS

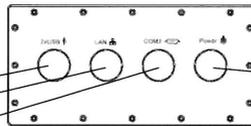
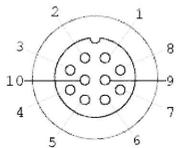
Quick Installation Guide of Full IP65/NEMA 4X PPC

Overview(PPC)

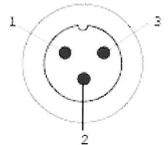
VESA standard (100*100)



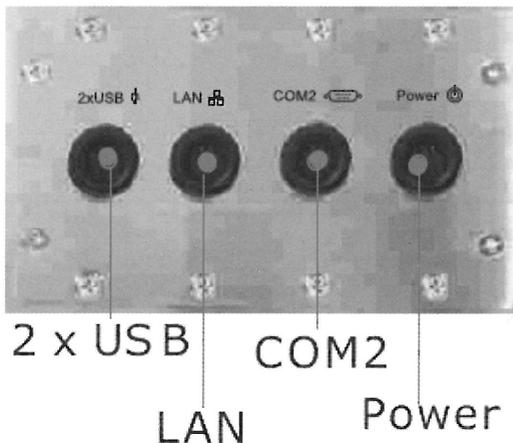
USB (2) / LAN / COM



Power

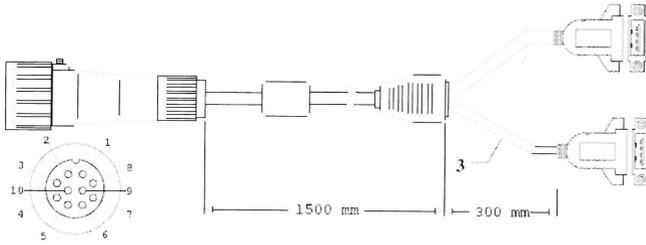


Full IP65 PPC provides Four IO. One is 2 x USB(10 pin) in the left side, LAN and COM connector in the middle, power connector in the right side. All of the connectors are IP65 level and fool-proofing design, it helps the end user to installation USB, LAN and COM cables correctly.



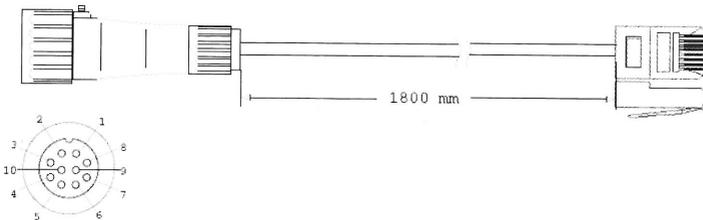
Cable drawing & Cable pin define

1. USB Cable



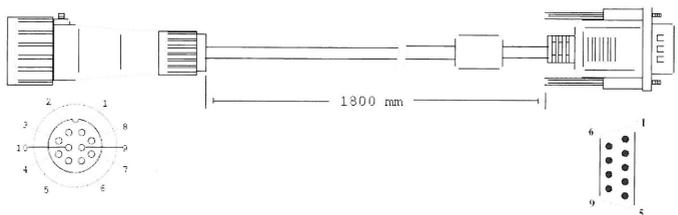
Pin Define Table					
cable type	10pin conn.		A Type Female		A Type Female
USB	Pin No.	Symbols	Pin No.	Symbols	Pin No. Symbols
	1	VCC	1	VCC	
	3D	-	2	D-	
	5D	+	3	D+	
	7	GND	4	GND	
	9N	C			
	2	VCC			1 VCC
	4D	-			2 D-
	6D	+			3 D+
	8	GND			4 GND
10	NC				

2. LAN Cable



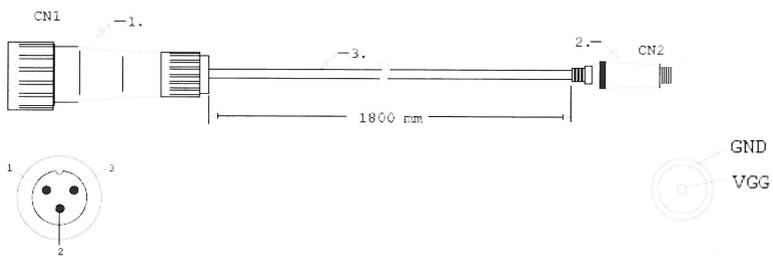
Pin Define Table					
cable type	10pin conn.		US PLUG 8P8C 3U*		
LAN	Pin No.	Symbols	Pin No.	Symbols	
	1		1		
	2		2		
	3		3		
	4		4		
	5		5		
	6		6		
	7		7		
	8		8		
	9	NC		9	NC
10	NC		10	NC	

3. RS-232 Cable



cable type	Pin Define Table				
	10pin conn.		D-Sub 9Pin		
RS232	Pin No.	Symbols		Pin No.	Symbols
	1	DCD-CON2	←→	1	DCD-CON2
	2	DSR-CON2	←→	6	DSR-CON2
	3	RXD-CON2	←→	2	RXD-CON2
	4	RTS-CON2	←→	7	RTS-CON2
	5	TXD-CON2	←→	3	TXD-CON2
	6	CTS-CON2	←→	8	CTS-CON2
	7	DTR-CON2	←→	4	DTR-CON2
	8	RI-CON2	←→	9	RI-CON2
	9	GND-CON2	←→	5	GND-CON2
10	NC	←→	10	NC	

4. Power Cable



Pin No.	Symbols	Color	Pin No.	Symbols	Color
CN1-1	VCC	Red	CN2	VCC	Red
CN1-3	GND	Black	CN2	GND	Black
CN1-2	Shield			Shield	

The Full-IP65 solution provides water proof and anti-dust cables: RS-232 cable, USB Cable, LAN cable and power cable. The water proof part of power cable is 1.8 meter long with IP-65 connector; the other side is normal cable with standard IO such as: RS232/USB/LAN and DC power jack. If you lost any one please contact with your supplier.

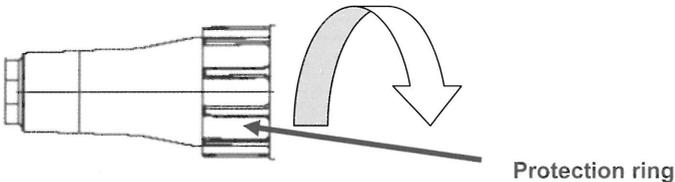
Installations

Step1. Open the covers on the connectors

All IO on the rear side of PPC is well protected with a plastic cover. Before installing the PPC, user needs to open it.

Step2. Power Cable Connection (3 pin)

The power cable is 3 pin IP65 connector design in PPC side. User need to plug in and make the cable fit the connector, then the O-ring on the cable will be squeezed as the protection ring is screwing clockwise.



Step3. USB/COM/LAN cable connection (10 pin)

Connect the USB/COM/LAN cable to your PC. The USB/COM/LAN connector is 10 pin designs in PPC side, User need to plug in and make the cable fit the 10 pin connector, and then the O-ring on the cable will be squeezed as the protection ring is screwing clockwise.

PPC Accessory list

USB cable	1 PCS
LAN Cable	1 PCS
RS-232 Cable	1 PCS
Power Cable	1 PCS
Adapter	1 PCS
Quick installation guide	1 PCS

< Notice >

Maximum useful distance about USB cable

In practice, the USB specification limits the length of a cable between USB2.0 devices to 5 meters (a little under 16 feet 5 inches). For USB1.1 devices the limit is 3 meters (9 feet 10 inches).

When you use an external USB device like USB CD-ROM, the length may be too long to transfer data if you use a USB adapter plug cable (A male to B male). Therefore we suggest you to use the USB Type A (male) to Type B (male) adapter we provide to keep the length of USB cable under safe range.



USB Type A (male) to Type B (male) adapter

