

Short Form CATALOGUE



Complete range of waterproof Connector and cable asssembly



*NEW*Junction Box



















Mini DIN

NEW AP Box / Vent Connector









APPLICATIONS



Outdoor Wireless CPE



 Marine Electronic Devices



Medical Devices and Equipments



- Wind Power Turbines

Outdoor LED Display

AND:

- Sensors
- DeviceNet, Profibus, Ethernet
- Data Acquisition Devices
- Telecommunication and Satellites Modems
- Industrial PC and POS
- Rugged Mobile and Handheld Terminals and Devices, Notebooks, POS
- Electric Motors

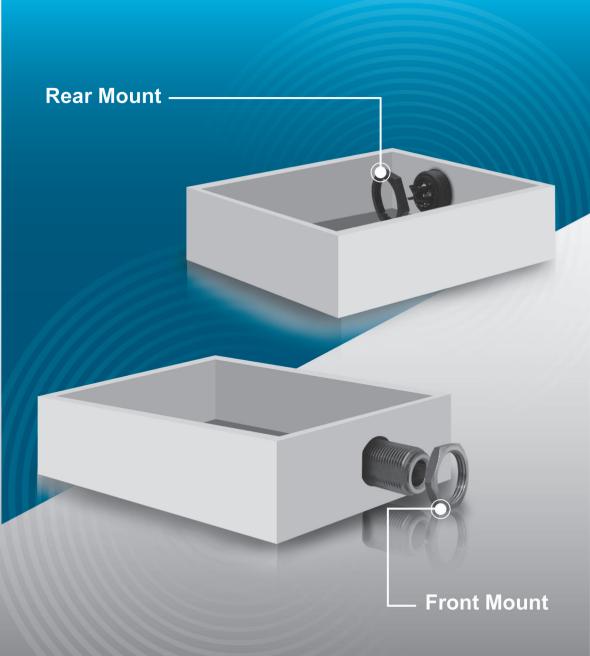
- Canbus and Automotive Electronic Equipments and Devices (Telematic, GPS, Fleet & Asset Management)
- CCTV and Security Devices
- RFID and Tagging Systems and Devices
- Military Commercial Equipments
- Weighing Scales
- Electronic Scoring

- Robotics
- Surveying and Telemetry Devices
- Measurements and Testing Equipments
- Batteries and Power Supply
- Traffic Systems and Signals
- Rugged and Outdoor Devices, Equipments and Machines

Many More.....



Front and Rear Mount





SPECIFICATIONS

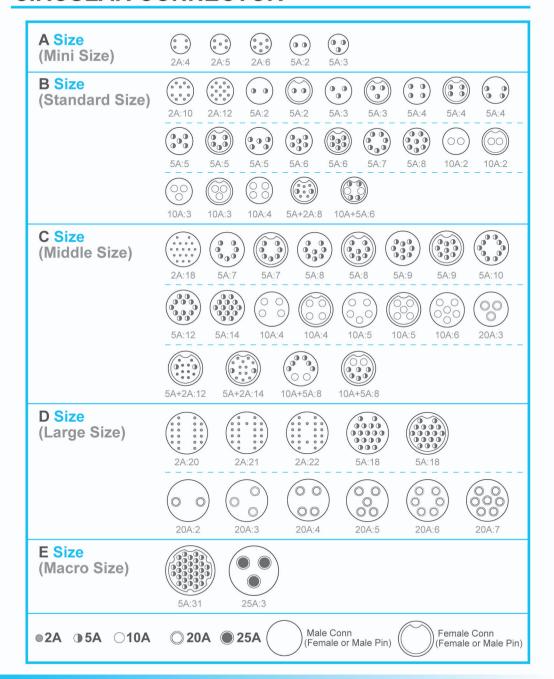


CIRCULAR SERIES

NO. SPECIFICATIONS	STANDARD VALU	JE	
01. Identifications	A Size (Mini Size) B Size (Standard Size) C Size (Middle Size) D Size (Large Size) E Size (Macro Size)		
02. Description	Panel Mount, Mole Field Installable	ded with Cable and	
03. Current Rating / Pin Arrangements	A Size (Mini): B Size (Standard) C Size (Middle): D Size (Large): E Size (Macro):	2A: 4 to 6, 5A: 2 and 3 : 2A: 10 or 12, 5A: 2 to 8, 10A: 2 to 4, 5A+2A: 8, 10A+5A: 6 2A: 18, 5A: 7 to 14, 10A: 4 to 6, 20A: 3, 5A+2A: 12 or 14, 10A+5A: 8 2A: 20 to 22, 5A: 18, 20A: 2 to 7 5A: 31, 25A: 3	
04. Material		Copper Alloy, Gold Plated Nylon + GF, UL Recognized	
05. Temperature Range	Cable: Connector Body:	20°C to + 80°C 40°C to +105°C	
06. Waterproof Rating	IP66 and IP67(Per	r IEC60590)	
07. Contact Resistance	≤10MΩ		
08. Insulation Resistance	≥100MΩ at DC 50	0V	
09. Durability	3000 Plug / Unplug	g Cycles Minimum	
10. Breakdown Voltage	≥AC 1000V/1 Minu	ute,≥ 500V / 1 Minute (1.5~5A)	
11. Corrosion	48 Hours Salt Spra	ay Contact	
12. Standard Cable Length (for Molded Cable)	1, 2, 5, 10M (Standard Cable: UL2464 PVC Jacket)		
13. Field Installable	All Solder Contact	s Except For D Size (Large) 20A	

02 CONTACT PIN ARRANGEMENTS

CIRCULAR CONNECTOR



Circular A Size (Mini Size)









						(Ollodial)	(Oquaic)
Pin	2A: 4 to 6 5A: 2 and 3	-				<u></u>	
Mating Style	Screw (Thread) Rear or Front M			ayonet) Front Mou	unt	Front Mount	Rear Mount
Assembly Style	PCB 180° (P) or Solder(S)	Front Moun	Solder(S)	Front Mo	Solder(S)	Rear Mount-Screw Solder(S)	Rear Mount-Lock Solder(S)















Panel (Chassis) Metal

Panel (Chassis) Plastic

Pin	2A: 4 to 6 5A: 2 and 3		
Mating Style	Lock (Bayonet) Front Mount	F	ront Mount
Assembly Style	PCB 180° (P) or Solder(S)	PCB(P)	Front Mount-Lock Solder(S)

Mating Part Molded with Cable (with or Without SR) or Field Installable	with SR	Without SR	Field Installable
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04 Circular B Size (Standard Size)









Panel (Chassis) Plastic



10A +5A: 6

Mating Style Screw (Thread) Rear or Front Mount

Lock (Bayonet) Rear or Front Mount





Assembly Style PCB 180° (P) | Front Mount-Screw

Pin

PCB 90° (R) Solder(S)





Front Mount-Lock PCB(P) Solder(S)

Rear Mount-Screw Solder(S)



Front Mount-Screw





Mating Part

Molded with Cable (with or Without SR) or Field Installable











Accessories













Panel (Chassis) Metal







Pin 2A: 10 5A: 4 to 8 **Mating Style**

Screw (Thread) Rear or Front Mount





Assembly Style PCB 180° (P) or Solder(S)



Solder(S)



Mating Part

Molded with Cable (Without SR) Field Installable







Accessories

Waterproof Cover



Circular C Size (Middle Size)



Panel (Chassis) Plastic



Pin	2A:18 5A:7 to 14 10A:4 to 6 20A:3 5A+2A:12 or 14 10A+5A:8					(a	W. W.
Mating Style	Screw (Thread) Rear or Front Mo	ount		Bayonet) or Front M	and the same of th	Front Mount	Rear Mount
Assembly Style	or Solder(S)	Front Mount-	Screw der(S)	Front Mo	Solder(S)	Rear Mount-Screw Solder(S)	Rear Mount-Lock Solder(S)





Fish Line or Chain



06 Circular D Size (Large Size)

Panel (Chassis) Plastic





Solder(S)



Rear Mount Rear Mount-Lock

Solder(S)

			(Oli Calai)
Pin	2A : 20 to 22 5A : 18 20A: 2 to 7		4
Mating Style	Screw (Thread) Rear or Front Mount	Lock (Bayonet) Rear or Front Mount	Front Mount
Assembly Style	PCB 180° (P) Front Mou or Solder(S)	Int-Screw Front Mount-Lock	Rear Mount-Screw



PCB(P) Solder(S) PCB(P) Solder(S)





Ф25.6

Panel (Chassis) Metal

Pin	5A: 18	100	
Mating Style	Screw (Thread) Front Mount	The second secon	ront Mount
Assembly Style	PCB 180° (P) or Solder(S)	Front Mo	unt-Screw Solder(S)

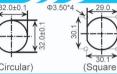
Mating Part	Molded with Cable (Without SR)	
		Without SR

Circular E Size (Macro Size)



NEW 25A:3

with SR



with SR

Panel (Chass	sis) Plastic	(Circular) (Square)
Pin	5A: 31 25A: 3	
Mating Style	Lock (Bayonet) Front Mount	Front Mount
Assembly Style	PCB 180° (P) or Solder(S)	Screw-In Termination PCB(P) Solder(S)
Mating Part	Molded with Cable (with SR)	Cable to Cable(In-Line) 25A:3

with SR

08 SPECIFICATIONS

RJ45 SERIES

NO. SPECIFICATION

01. Identifications	RJ45 Jack and plug
02. Description	Panel Mount, Molded with Cable and Field Installable
03. Data	100 Base, 100 Base T and 1000 Base T Networks Cat 5E per TIA or EIA 568B Class D per ISO / IEC 11801
04. Category	Option 1: Cat. 5E Option 2: Cat. 5E Option 3: Cat. 6 or 5E Option 5: Cat. 5E Option 6: Cat. 5E
0 5 . Material	Contacts: Copper Alloy with Gold Plated Connector Body: PBT(Jack), Polycarbonate(Plug)
06. Temperature Range	-20°C to +80 C
07. Waterproof Rating	IP67, IP68
08. Durability	500 Cycles
09. Flame Test	UL / CSA FT4 Flame Test
10. Thermal shock	5 Cycles at -20°C to +80°C
11. Salt Spray	48 hrs
12. Standard Cable Length	1, 2, 5, 10M

(Standard Cable: UTP or FTP (Cat.5E))

(for Molded Cable)

RJ45 Option 1 Panel Mount Screw Type



(Smallest In The Market)

Panel (Chassis) Mount

Connector NO.1 Features



LTWRJ-5EPFFD-SC7001

Screw Type Cat 5F Punch Down Wiring IP67 When Mated

Connector NO.2 Features



LTWR.IS-5EPEE.I-SC7001

Screw Type Cat 5E. Shielded 90° Jack Termination IP67 When Mated

Connector NO.3 Features



Screw Type Cat 5E. Shielded Jack Termination With Ground Pin IP67 (Unmated) Stand Alone

Connector NO.4



LTWRJS-5EPFFJ-SC7008

Features

Metal Connector, Screw Type Cat 5E. Shielded Jack Termination IP67 (Unmated) Stand Alone

Connector NO.5



LTWRJS-5EPFFJ-SC7009

Features

Metal Connector, Screw Type Cat 5E. Shielded Flying Leads With RJ Pigtail IP67 (Unmated) Stand Alone

Connector NO.6 Features



ITWR.IS-5EPEE.I-SC7002 (Without Ground Pin) LTWRJS-5EPFFJ-SC7003 IP67 When Mated (With Ground Pin)

Screw Type Cat 5F Shielded Jack Termination With or Without Ground Pin

Connector NO.7



LTWR.J-5FAFFM-SL7xxx ITWR.IS-5FAFFM-SI 7xxx (Shielded)

Features

Screw Type Cat 5F Shielded or Unshielded In-line Molded Type(Cable to Cable) IP67 (Unmated) Stand Alone

Connector NO.8 Features



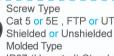
LTWRJS-5EPFFJ-SC7005 (With Ground Pin) LTWRJS-5EPFFJ-SC7006 (Without Ground Pin)

Screw Type Cat 5E Shielded Ready to Connect With or Without Ground Pin IP67 When Mated

Mating Part



Screw Type Field Installable for On Site Termination RJ45 Plug, IP67 When Matedd





Screw Type Field Installable for On Site Termination RJ45 Plug, IP67 When Mated



Cat 5 or 5E, FTP or UTP Shielded or Unshielded IP67 (Unmated) Stand Alone



Screw Type, Metal Nut Field Installable for On Site Termination RJ45 Plug, IP67 When Mated Mating pair of connector NO.4 & 5



Dummy Cover



Waterproof Cover (Metal) With Rubber Lead or Fish Line or Chain



Waterproof Cover With Rubber Lead



Waterproof Cover With Fish Line



Waterproof Cover With Chain

10 RJ45 Option 2 Panel Mount Screw Type

Panel (Chassis) Mount

Connector NO.1



LTWRJS-5EPFFJ-SS7001

Features

Screw Type Cat 5F Shielded Jack Termination IP67 When Mated

Connector NO.3 Features



LTWRJS-5EPFFD-SS7002

Screw Type Cat 5F Shielded Punch Down Wiring IP67 When Mated

Connector NO.2 Features



LTWR.IS-5EPEE.I-SS7002

Screw Type, Cat 5F, Shielded Ready to Connect Flying Leads With RJ Pigtail IP67 When Mated

Connector NO.4 Features



LTWR.IS-00PFFR-SS7001

Screw Type Shielded PCR 90° IP67 When Mated

Mating Part



Screw Type Unshielded Field Installable for On Site Termination RJ45 Plug, IP67 When Mated



Screw Type Unshielded Field Installable for On Site Termination IP67 When Mated



Screw Type Cat 5 or 5E Shielded IP67 (Unmated) Stand Alone



Screw Type Cat 5 or 5E Shielded IP67 (Unmated) Stand Alone

Accessories



Waterproof Cover With Chain



Waterproof Cover With Rubber Lead



Waterproof Cover With Fish Line

RJ45 Option 3 Panel Mount Screw Type









Panel (Chassis) Mount

Connector NO.1



ITWR.IS-5EPEED-SC7xxx (Cat 5E)

Features

Screw Type Cat 6 or 5F Shielded Punch Down Wiring IP67 When Mated

Connector NO.3



LTWRJ-06PFFD-SS7001 ITWR.I-5EPEED-SS7001 (Cat 5E)

Features

Screw Type Cat 6 or 5E Unshielded Punch Down Wiring IP67 When Mated

Connector NO.2 Features



LTWRJS-06PFFD-SS7001 ITWRJS-5FPFFD-SS7001 (Cat 5E)

Screw Type Cat 6 or 5E Shielded Punch Down Wiring IP67 When Mated

Mating Part



Screw Type Field Installable Feed Thru for Pre-Terminated Cable With Plug RJ45 Plua IP67 When Mated

Mating pair of connector NO.1 & 2



Screw Type Field Installable Feed Thru for Pre-Terminated Cable With Plug RJ45 Plua IP67 When Mated Mating pair of connector NO.3

Accessories



Waterproof Cover With Chain Accessories for connector NO.3



Waterproof Cover With Rubber Lead Accessories for connector NO.3

12 RJ45 Option 4 Panel Mount Screw Type

Panel (Chassis) Mount

Connector NO.1 Features



Screw Type Panel With Cover IP67 When Mated

ITWR.IS-00PFF.I-SC7001

Connector NO.3 Features



LTWRJS-00PFFA-SC7001 IP67 When Mated

Screw Type Panel In-Line Shielded Field Installable Feed Thru

Connector NO.2 Features



ITWR.IS-00BFFA-SI 7001

Screw Type Panel In-Line Shielded Field Installable Feed Thru IP67 When Mated

Accessories



Waterproof Cover With Rubber Lead Accessories for connector NO 3

RJ45 Option 5 Panel Mount Screw Type

Panel (Chassis) Mount

Connector NO.1 Features



Cat 5E. Unshielded RJ45 Non-Waterproof With Ground Pin Field Installable Feed Thru

IP67 When Mated

RJ45 Option 6 Panel Mount Lock Type



Panel (Chassis) Mount

Connector NO.1 Features



LTWRJ-5EPFFP-LC7001 ITWR.IS-5EPEEP-I C7001

Lock Type Cat 5F Unshielded or Shielded 180° PCB Type IP67 (Unmated) Stand Alone

Connector NO.2 Features



ITWR.IS-5FAMMM-I R7xxx

Lock Type Cat 5 or 5E Shielded Panel With Pigtail IP67 (Unmated) Stand Alone

Mating Part



Lock Type Cat 5 or 5E. Shielded 180° Molded Type (Cable to Cable) IP67 (Unmated) Stand Alone



Lock Type Cat 5 or 5E, Shielded 90° Molded Type (Cable to Cable) IP67 (Unmated) Stand Alone



Lock Type Field Installable for On Site Termination IP67 When Mated



Lock Type Field Installable for On Site Termination IP67 When Mated

Accessories



Waterproof Cover With Chain



Waterproof Cover With Rubber Lead

RJ45 Option 7 Cable Gland

Panel (Chassis) Mount

Connector NO.1 Features



LTWCSG-16G010

Screw Type Cable Range Φ 10.0MM to Φ14.0MM IP68 When Mated Feed Thru

14 SPECIFICATIONS

SENSOR SERIES

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications M8, M10.5, M12, M12 B-Coded, M12 D-Coded,

M12 I-Style

02. Description Panel Mount, Molded with Cable and

Field Installable

03. Current Rating / Pin M8: 5A: 3 and 4 **Arrangements** M10.5: 2A: 2 to 5

M12: 2A: 8. 5A: 3 to 5

M12 B-Coded: 5A: 4 and 5 M12 D-Coded: 5A: 4 and 5

M12 I-Style: 5A: 5

04. Material Contacts: Copper Alloy, Gold Plated

Connector Body: Nylon + GF or PU, UL Recognized

Shield: Zinc Alloy or Copper Alloy,

Nickel Plated

0 5 . Temperature Range Cable: -25°C to + 90°C (PU),

 -20° C to + 80° C (PVC)

Connector Body: -25°C to + 90°C

06. Waterproof Rating IP65, IP66, IP67, IP68

07. Contact Resistance ≤10MΩ

08. Insulation Resistance ≥100MΩ at DC 500V

09. Durability 3000 Plug / Unplug Cycles Minimum

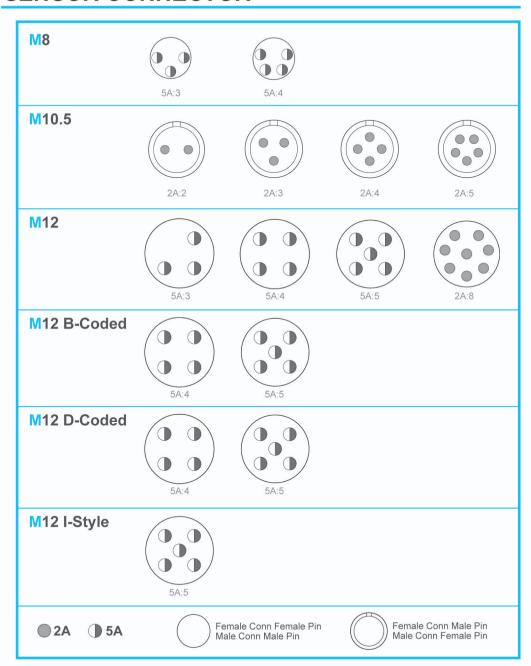
10. Breakdown Voltage ≥AC 500V / 1 Minute

12. Standard Cable Length 1, 2, 5, 10M

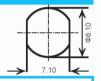
(for Molded Cable) (Standard Cable: UL2464 PVC Jacket or PU)

13. Field Installable All Solder Contacts Unless And Otherwise Indicated

SENSOR CONNECTOR



16 M8 Sensor Female Panel (5A)



Panel (Chassis) Mount

Connector NO.1

Rear Mounting LTW8-1 PFFS-SH7001

Features

Screw Type, Solder Contacts Rear Mounted IP67 (Unmated) Stand Alone 1 →5A: 3 and 4

Mating Part



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)With SR PVC or PU Cable IP67 (Unmated) Stand Alone 5A: 3 and 4



Screw Type 180° or 90° In-line Molded Type (Cable to Cable) Without SR PVC or PU Cable Without SR IP67 (Unmated) Stand Alone

5A: 3 and 4







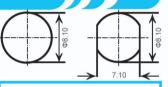
NEW Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 5A: 4

Accessories



Cap-Screw (for Female)

M8 Sensor Male Panel (5A)



Panel (Chassis) Mount

Connector NO.1



Features

Quick Type Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP67 (Unmated) Stand Alone $\uparrow \rightarrow 5A$: 3 and 4

Connector NO.3 Features



Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP67 (Unmated) Stand Alone 1 →5A: 3 and 4

Connector NO 2

TW8P-1 PMMP-SF7001



Features

Screw Type, Solder Contacts Rear Mounted IP67 (Unmated) Stand Alone 1 →5A: 3 and 4



Mating Part



Screw Type

180° or 90° In-line Molded Type (Cable to Cable)With SR PVC or PU Cable

IP67 (Unmated) Stand Alone 5A: 3 and 4

Mating pair of connector NO.2 & 3



Screw Type

180° or 90° In-line Molded Type (Cable to Cable) Without SR PVC or PU Cable

Mating pair of connector NO.2 & 3

Without SR IP67 (Unmated) Stand Alone 5A: 3 and 4

90° Without SR



Quick Type 180°In-line Molded Type (Cable to Cable)With SR PVC or PU Cable

IP65 (Unmated) Stand Alone 5A: 3 and 4

Mating pair of connector NO.1



MEW Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 5A · 4

Accessories



Cap-Screw (for Male)

18 M8 Sensor Male Plastic (5A)

Field Installable

Connector NO.1 Features



Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 5A · 4

Mating Part



MEW Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 54.4

Accessories



Cap-Screw (for Female)



Cap-Screw (for Male)

M10.5 Sensor Male Panel (2A)

Panel (Chassis) Mount



Connector NO.1



Rear Mounting LTW105-1 PMFS-SC7001 1 →2A: 2 to 5

Features

Screw Type Solder Contacts Circular Rear Mounted IP67 (Unmated) Stand Alone

Connector NO.2

No Drawing Picture

LTW105-1 PMFS-SH7001

Features

Screw Type Solder Contacts Hexagonal Rear Mounted IP67 (Unmated) Stand Alone

 \rightarrow 2A: 2 to 5

Mating Part



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)With SR PVC or PU Cable IP67 (Unmated) Stand Alone

2A: 2 to 5



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable

Without SR IP67 (Unmated) Stand Alone 2A: 2 to 5



M12 Female Panel (2A).(5A)

Panel (Chassis) Mount

Connector NO.1 Features



Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP68 (Unmated) Stand Alone 1 →2A: 8 . 5A: 3 to 5

Connector NO.2 Features



Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone 1 → 2A: 8 . 5A: 3 to 5

Mating Part



Screw Type

180° or 90° In-line Molded Type (Cable to Cable)With SR PVC or PU Cable IP67 (Unmated) Stand Alone 2A: 8, 5A: 3 to 5



For Cable to Cable, See Page 20



Screw Type

180° or 90° In-line Molded Type (Cable to Cable) Without SR PVC or PU Cable Without SR IP68 (Unmated) Stand Alone

2A: 8, 5A: 3 to 5





Screw Type, Shielded 180° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable IP67 (Unmated) Stand Alone 2A: 8, 5A: 3 to 5



Vithout SR

Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 5A: 3 to 5





Screw Type Solder Contacts Field Installable IP68 When Mated 2A: 8, 5A: 3 to 5



Screw Type Y Cable Adaptor PU Cable IP68 (Unmated) Stand Alone 2A: 8, 5A: 3 to 5 For Cable to Cable, See Page 20



Cap-Screw (for Female)



T Cable



T Adaptor



I Adaptor



Y Adaptor

20

M12 Male Panel (2A),(5A)

Panel (Chassis) Mount





LTW12-1 PMMS-SF8001 TW12-1 PMMP-SF8001

Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP68 (Unmated) Stand Alone 1 → 2A: 8 . 5A: 3 to 5

Connector NO.2 Features



Rear Mounting TW12-1 PMMS-SH8001

Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone 1 → 2A: 8 . 5A: 3 to 5

Mating Part



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)With SR PVC or PU Cable IP67 (Unmated) Stand Alone



2A: 8, 5A: 3 to 5 For Cable to Cable, See Page 19



Screw Type

180° or 90° In-line Molded Type (Cable to Cable) Without SR PVC or PU Cable Without SR IP68 (Unmated) Stand Alone

2A: 8, 5A: 3 to 5





Screw Type, Shielded 180° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable IP67 (Unmated) Stand Alone 2A: 8 . 5A: 3 to 5



Without SR

Screw Type, LED 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable IP67 (Unmated) Stand Alone





Screw Type Solder Contacts Field Installable IP68 When Mated 2A: 8, 5A: 3 to 5



Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated





Screw Type Y Cable Adaptor PU Cable IP68 (Unmated) Stand Alone 2A: 8, 5A: 3 to 5 For Cable to Cable, See Page 19



Cap-Screw (for Male)



T Cable



T Adaptor



Adaptor



Y Adaptor

M12 Male Plastic (2A)



Field Installable

Connector NO.1 Features



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR IP68 (Unmated) Stand Alone 2A · 8

Connector NO.2



LTW12P-08BMMA-SL8001

Features

Screw Type Solder Contacts Field Installable IP68 When Mated 2A · 8

Mating Part



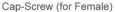
Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR IP68 (Unmated) Stand Alone





Screw Type Solder Contacts Field Installable IP68 When Mated 2A · 8







Cap-Screw (for Male)



M12 Male Plastic (5A)

Field Installable

Connector NO.1 Features



Screw Type Solder Contacts Rear Mounted IP68 (Unmated) Stand Alone \rightarrow 5A: 3 to 5

Connector NO.3



Screw Type Solder Contacts Field Installable IP68 When Mated \rightarrow 5A: 3 to 5

Connector NO.2

TW12P-1 PMMS-SC8001



Features

Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR IP68 (Unmated) Stand Alone $\uparrow \rightarrow 5A$: 3 to 5

Connector NO.4

1 TW12P-1 BMMA-SI 8001



Features

Features

Screw Type Screw In Termination 180° or 90° In-line Molded Type (Cable to Cable)Field Installable IP68 When Mated $A \rightarrow 5A \cdot 3 \text{ to } 5$

Mating Part



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR IP68 (Unmated) Stand Alone





Screw Type Screw In Termination 180° or 90° Field Installable IP68 When Mated 5A: 3 to 5





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 3 to 5

Accessories



Cap-Screw (for Female)



Cap-Screw (for Male)

M12 B-Code Female Panel (5A)

Panel (Chassis) Mount

Connector NO.1 Features



LTW12B-1 PFFS-SF8001 TW12B-1 PEEP-SE8001

Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP68 (Unmated) Stand Alone $A \rightarrow 5A \cdot 4$ and 5

Connector NO.2 Features



Rear Mounting 1TW12B-1 PFFS-SH8001

Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone $\uparrow \rightarrow 5A$ 4 and 5

Mating Part



Screw Type 180° or 90° In-line Molded Type Cable to Cable)Without SR PVC or PU Cable 180° Vithout SR IP68 (Unmated) Stand Alone

Without SR

5A: 4 and 5 For Cable to Cable, See Page 24



Screw Type Screw In Termination 180° or 90° Field Installable IP68 When Mated 5A: 4 and 5





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 4 and 5



Screw Type Y Cable Adaptor PU Cable IP68 (Unmated) Stand Alone 5A: 4 and 5 For Cable to Cable, See Page 24



Cap-Screw (for Female)



T Cable



T Adaptor



I Adaptor



Y Adaptor

24 M12 B-Code Male Panel (5A)

Panel (Chassis) Mount

Connector NO.1 Features



LTW12B-1 PMMS-SF8001 TW12B-1 PMMP-SF8001

Screw Type Hexagonal Flange Solder or PCB Contacts IP68 (Unmated) Stand Alone $A \rightarrow 5A \cdot 4$ and 5

Connector NO.2 Features



TW12B-1 PMMS-SH8001

Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone $\uparrow \rightarrow 5A$: 4 and 5

Mating Part



Screw Type

180° or 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable 180° Vithout SR IP68 (Unmated) Stand Alone



5A: 4 and 5 For Cable to Cable, See Page 23



Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 5A: 4 and 5





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 4 and 5



Screw Type Y Cable Adaptor PU Cable

IP68 (Unmated) Stand Alone 5A: 4 and 5

For Cable to Cable, See Page 23



Cap-Screw (for Male)



T Cable



T Adaptor



Adaptor



Y Adaptor

M12 B-Code Male Plastic (5A)



Field Installable

Connector NO.1 Features



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR Solder or PCB Contacts IP68 (Unmated) Stand Alone 1 →5A: 4 and 5

Connector NO.3 Features



Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated $\uparrow \rightarrow 5A$: 4 and 5

Connector NO.2 Features



Screw Type Solder Contacts Field Installable IP68 When Mated $\uparrow \rightarrow 5A$: 4 and 5

Mating Part



Screw Type

180° or 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable Without SR IP68 (Unmated) Stand Alone



Without SR



Screw Type Solder Type

180° or 90° Field Installable IP67 When Mated 5A: 4 and 5





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 4 and 5

Accessories



Cap-Screw (for Female)



Cap-Screw (for Male)

26 M12 D-Code Female Panel (5A)

Panel (Chassis) Mount

Connector NO.1 Features



LTW12D-1 PFFS-SF8001 TW12D-1 PEEP-SE8001

Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP68 (Unmated) Stand Alone $A \rightarrow 5A \cdot 4$ and 5

Connector NO.2



TW12D-1 PEES-SH8001

Features

Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone $A \rightarrow 5A \cdot 4$ and 5

Mating Part



Screw Type 180° or 90° In-line Molded Type

(Cable to Cable)Without SR PVC or PU Cable Without SR IP68 (Unmated) Stand Alone 5A: 4 and 5





Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 5A: 4 and 5





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 4 and 5



Screw Type Y Cable Adaptor PU Cable IP68 (Unmated) Stand Alone

5A: 4 and 5 For Cable to Cable, See Page 27



Cap-Screw (for Female)



T Cable



T Adaptor



I Adaptor



Y Adaptor

M12 D-Code Male Panel (5A)

Panel (Chassis) Mount

Connector NO.1 Features



TW12D-1 PMMP-SF8001

Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP68 (Unmated) Stand Alone $A \rightarrow 5A \cdot 4$ and 5

5A: 4 and 5

Connector NO.2 Features



TW12D-1 PMMS-SH8001

Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone $\stackrel{\wedge}{\longrightarrow}$ 5A 4 and 5

Mating Part



Screw Type 180° or 90° In-line Molded Type Cable to Cable)Without SR PVC or PU Cable Without SR IP68 (Unmated) Stand Alone

For Cable to Cable, See Page 26



Without SR



Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 5A: 4 and 5





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 4 and 5



Screw Type Y Cable Adaptor PU Cable IP68 (Unmated) Stand Alone 5A: 4 and 5 For Cable to Cable, See Page 26



Cap-Screw (for Male)



T Cable



T Adaptor



I Adaptor



Y Adaptor

28 M12 D-Code Male Plastic (5A)

Field Installable

Connector NO.1 Features

ITWSDP-1 BMMM-SI 8XXX

Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable IP68 (Unmated) Stand Alone TWSDP-↑BMMM-SR8XXX ↑→5A: 4 and 5

Connector NO.3 Features



TWSDP-1 BMMB-SR7XXX

Screw Type Screw In Termination 180° or 90° Field Installable IP67 When Mated 1 →5A: 4 and 5

Connector NO.2 Features



Screw Type Solder Contacts Field Installable IP68 When Mated

LTWSDP- \uparrow BMMA-SL8XXX $\uparrow \uparrow \rightarrow 5A$: 4 and 5

Mating Part



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable Without SR IP68 (Unmated) Stand Alone 5A: 4 and 5





Screw Type Screw in Termination 180° or 90° Field Installable IP67 When Mated 5A: 4 and 5





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 4 and 5

Accessories



Cap-Screw (for Female)



Cap-Screw (for Male)

M12 I-Style Female Panel (5A)



Panel (Chassis) Mount

Connector NO.1 Features



LTW12- 05PFIP-SF8001

Screw Type Hexagonal Flange Front Mounted Solder or PCB Contacts IP68 (Unmated) Stand Alone 5A · 5

Connector NO.2 Features



ITW12-05PFIS-SH8001

Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone 5A . 5

Mating Part



Screw Type 180° or 90° In-line Molded Type Cable to Cable)Without SR PVC or PU Cable 180° Vithout SR IP68 (Unmated) Stand Alone

5A . 5



For Cable to Cable, See Page 30



180° or 90° In-line Molded Type Cable to Cable)With SR PVC or PU Cable IP67 (Unmated) Stand Alone

Screw Type



5A · 5



Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 5



With SR

Screw Type Y Cable Adaptor PVC or PU Cable

IP68 (Unmated) Stand Alone 5A: 5

For Cable to Cable, See Page 30



Cap-Screw (for Female)



T Cable



T Adaptor



I Adaptor



Y Adaptor

30 M12 I-Style Male Panel (5A)

Panel (Chassis) Mount

Connector NO.1



LTW12- 05PMIS-SF8001 LTW12- 05PMIP-SF8001

Features

Screw Type Hexagonal Backshell Front Mounted Solder or PCB Contacts IP68 (Unmated) Stand Alone 5A: 5

Connector NO.2



LTW12- 05PMIS-SH8001

Features

Screw Type Rear Mounted Solder Contacts IP68 (Unmated) Stand Alone 5A · 5

Mating Part



180° or 90° In-line Molded Type (Cable to Cable)Without SR

Screw Type

PVC or PU Cable 180° Vithout SR IP68 (Unmated) Stand Alone

For Cable to Cable, See Page 29



Without SR

180 With SR

Screw Type

180° or 90° In-line Molded Type (Cable to Cable)With SR PVC or PU Cable IP67 (Unmated) Stand Alone 5A . 5



For Cable to Cable, See Page 29



Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 5



Screw Type Y Cable Adaptor PVC or PU Cable

IP68 (Unmated) Stand Alone 5A: 5

For Cable to Cable, See Page 29



Cap-Screw (for Male)



T Cable



T Adaptor



I Adaptor



Y Adaptor

M12 I-Style Male Plastic (5A)



Field Installable

Connector NO.1 Features



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable IP68 (Unmated) Stand Alone TW12P-05BMIM-SR8XXX 5A: 5

Connector NO.2 Features



LTW12P-05BMIA-SL8XXX

Screw Type Solder Contacts Field Installable IP68 (Unmated) Stand Alone 5A: 5

Mating Part



Screw Type 180° or 90° In-line Molded Type (Cable to Cable)Without SR PVC or PU Cable 180° Without SR IP68 (Unmated) Stand Alone





Screw Type Solder Contacts Field Installable IP68 When Mated 5A: 5







Cap-Screw (for Male)

32 **SPECIFICATIONS**

D-SUB SERIES

NO SPECIFICATIONS STANDARD VALUE

0.1 Identifications Standard D-Sub Connector

High Density D-Sub Connector

02. Description Panel Mount, Molded with Cable and

Field Installable

03. Current Rating / Pin Standard D-Sub 5A: 9, 15, 25, 37, 50 **Arrangements**

High Density D-Sub: 2A: 15, 26, 44, 62, 78

0.4 Material Contacts: Copper Alloy, Gold Plated

Connector Body: Nylon 9T or PBT, UL Recognized

Shell: Steel, Nickel Plated

05. Temperature Range Cable: -20°C to + 80°C

Connector Body: -40°C to +105°C

06. Waterproof Rating IP67(Per IEC60590), IP68

07. Contact Resistance <20MΩ

0.8. Insulation Resistance >500MO at DC 500V

09. Breakdown Voltage ≥AC 500V / 1 Minute

10. Standard Cable Length 1, 2, 5, 10M (Standard Cable: UL2464) (for Molded Cable)

11. Field Installable All Solder Contacts Unless And Otherwise Indicated

D-SUB CONNECTOR

Standard D-Sub		(0000)
Size 1	5A: 9 (Male)	5A: 9 (Female)
Size 2	5A: 15 (Male)	5A: 9 (Female)
Size 3	5A: 25 (Male)	5A: 25 (Female)
Size 4	5A: 37 (Male)	5A: 37 (Female)
Size 5	5A: 50 (Male)	5A: 50 (Female)
High Density D-S	ub	00000 00000 00000
Size 1	2A: 15 (Male)	2A: 15 (Female)
Size 2	2A: 26 (Male)	2A: 26 (Female)
Size 3	2A: 44 (Male)	2A: 44 (Female)
Size 4	2A: 62 (Male)	2A: 62 (Female)
Size 5	2A: 78 (Male)	2A: 78 (Female)
Male: •2A •5A Female: ∘2A ∘5A	Male Conn (Male Pin)	Female Conn (Female Pin)

34 D-SUB Size 2 Push-Pull Type (5A)

Panel (Chassis) Metal

Connector NO.1 Features



Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded, PCB or Solder Contacts IP68 (Unmated) Stand Alone 5A: 15

Mating Part



Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded Solder Contacts Field Installable IP67 When Mated 5A: 15

High Density D-SUB Size 2 Push-Pull Type (2A)

Panel (Chassis) Metal

Connector NO.1 Features



Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded, PCB or Solder Contacts IP68 (Unmated) Stand Alone 2A: 26

Mating Part



Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded, Solder Contacts Field Installable

2A 26

IP67 When Mated

D-SUB Screw Type (5A)



Panel (Chassis) Plastic

Connector NO.1



Features

Connector+Contact Gender: FF or MM Only (F-Female, M-Male) PCB or Solder Contacts IP67(5A: 37) or IP68(5A: 9, 15, 25) (Unmated) Stand Alone 5A· 9 15 25 37

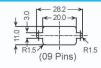
Connector NO.2

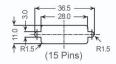


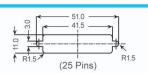
Features

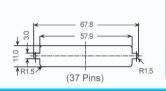
Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded PCB or Solder Contacts IP67 (Unmated) Stand Alone 5A: 50

Cut-Out











Mating Part



With SR

Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded In-line Molded Type (Cable to Cable)With SR IP67 (Unmated) Stand Alone 5A: 9, 15, 25, 37, 50 Mating pair of connector NO.1 & 2



Without SR

Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded Solder Contacts Without SR Crimp Contact (10K Terminals/ Reel)

Field Installable, without SR IP67 When Mated 5A: 9, 15, 25

Mating pair of connector NO.1

Accessories



Waterproof Cover (for Size 1 to 3)



Joiner for Cable Connector (for Size 1 to 3)



Dust Cap (for Size 1 to 3)

36 High Density D-SUB Screw Type (2A)

Panel (Chassis) Mount

Connector NO.1



Features

Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded PCB or Solder Contacts IP67(2A: 62) or IP68(2A: 15, 26, 44) (Unmated) Stand Alone 2A: 15 26 44 62

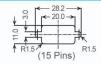
Connector NO.2

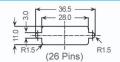


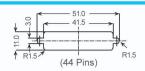
Features

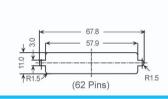
Connector+Contact Gender: FF or MM Only (F-Female, M-Male) Shielded PCB or Solder Contacts IP67 (Unmated) Stand Alone 2A · 78

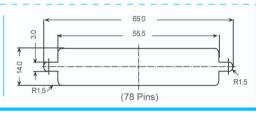
Cut-Out











Mating Part



With SR

Connector+Contact Gender: FF

or MM Only (F-Female, M-Male) Shielded In-line Molded Type (Cable to Cable)With SR IP67 (Unmated) Stand Alone 2A: 15, 26, 44, 62, 78 Mating pair of connector NO.1 & 2





Field Installable, without SR IP67 When Mated 2A: 15, 26, 44

Mating pair of connector NO.1

Connector+Contact Gender: FF

Accessories



Waterproof Cover (for Size 1 to 3)



Joiner for Cable Connector (for Size 1 to 3)



Dust Cap (for Size 1 to 3)



USB SERIES

NO SPECIFICATIONS STANDARD VALUE 0.1 Identifications **USB A Type USB B Type** 02. Description Panel Mount, Molded with Cable and Field Installable 03. Current Rating 1.5A 04. Speed 480Mbps 0.5. Material Copper Alloy, Gold Plated Contacts: Connector Body: PBT UL94V-0 06. Temperature Range -20°C to + 80°C 07. Waterproof Rating IP67(Per IEC60590), IP68 0.8. Contact Resistance ≤30MQ Max 0.9 Insulation Resistance ≥1000MΩ Min 10. Breakdown Voltage >AC 500V / 1 Minute 11. Standard Cable Length 1, 2, 5M (Standard Cable: USB 2.0) (for Molded Cable)

38 **USB** Lock Type

Panel (Chassis) Mount

Connector NO.1



LTWUA-20PMFP-LC7001 TWUA-20PMFP-LC7002

Features

USB A Type Male Connector PCB 180° With or Without Flying Lead IP67 (Unmated) Stand Alone

Connector NO.2 Features



LTWUB-20PMFP-LC7001 LTWUB-20PMFP-LC7002

USB B Type Male Connector PCB 180° With or Without Flying Lead IP67 (Unmated) Stand Alone

Mating Part



USB A Type Female Connector 180° or 90° In-line Molded Type (Cable to Cable)With SR Cable Length 1 to 5 Meters IP67 (Unmated) Stand Alone Mating pair of connector NO.1

180° With SR Available (LTWUA-20AFMM-LL7AXX)



USB B Type Female Connector 180° or 90° In-line Molded Type (Cable to Cable)With SR Cable Length 1 to 5 Meters IP67 (Unmated) Stand Alone Mating pair of connector NO.2

180° With SR Available (LTWUB-20AFMM-LL7AXX)

Accessories







Waterproof Cover With Rubber Lead

USB Screw Type



Panel (Chassis) Mount

Connector NO.1 Features



LTWUA-20PMFP-SC8002

(With)

USB A Type Male Connector PCB 180°

LTWUA-20PMFP-SC8001 With or Without Flving Lead IP68 (Unmated) Stand Alone

Connector NO.4 Features



LTWUB-20AMFM-SL7AXX

USB B Type Male Connector In-line Molded Type (Cable to Cable)With SR Cable Length 1 to 5 Meters IP67 (Unmated) Stand Alone

Connector NO.2 Features



LTWUB-20PMEP-SC8002 (With)

USB B Type Male Connector PCB 180°

LTWUB-20PMFP-SC8001 With or Without Flying Lead IP68 (Unmated) Stand Alone

Connector NO.5



ITWUA-20BMFA-SI 8001



Connector NO.3 Features



LTWUA-20AMFM-SL7AXX

USB A Type Male Connector In-line Molded Type (Cable to Cable)With SR Cable Length 1 to 5 Meters IP67 (Unmated) Stand Alone

Connector NO.6 Features



LTWUB-20BMFA-SL8001

USB B Type Male Connector Field Installable Without Cable IP68 When Mated

Mating Part



Female Connector In-line Molded Type (Cable to Cable)Without SR Without SR Cable Length 1 to 5 Meters IP67 (Unmated) Stand Alone Mating pair of connector NO.1, 3, 5

USB A Type



Without SR

USB B Type Female Connector In-line Molded Type (Cable to Cable)Without SR Cable Length 1 to 5 Meters IP67 (Unmated) Stand Alone Mating pair of connector NO.2, 4, 6

Accessories



Waterproof Cover With Chain

Waterproof Cover With Rubber Lead



Waterproof Cover With Fish Line

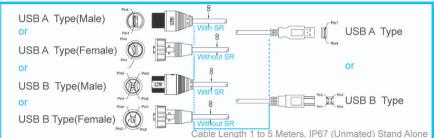


Waterproof Box

Waterproof **USB**

to

Non-Waterproof **USB**



Mini USB SERIES

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications USB B Type

02. Description Panel Mount, Molded with Cable and

Field Installable

03. Current Rating 1A

04. Speed 480 Mbps

0 5 . Material Contacts: Copper Alloy, Gold Plated

Connector Body: PBT UL94V-0

06. Temperature Range -20°C to + 80°C

07. Waterproof Rating IP67(Per IEC60590), IP68

08. Contact Resistance ≤30MΩ Max

09. Insulation Resistance ≥1000MΩ at DC 500V

10. Breakdown Voltage ≥AC 500V / 1 Minute

11. Standard Cable Length 1, 2, 5M (Standard Cable: USB 2.0) (for Molded Cable)

Mini USB B Type Screw Type



Panel (Chassis) Mount

Connector NO.1



LTWNUB-20PMFP-SC7001

Features

Male Connector PCB 180° IP67 (Unmated) Stand Alone

Connector NO 3 Features



ITWNUB-20BMFA-SI 7001

Male Connector Field Installable Without SR IP67 When Mated

Connector NO.2



Features

Male Connector PCB 90° IP67 (Unmated) Stand Alone

Connector NO.4 Features



LTWNUB-20AMFM-SL7AXX

Male Connector In-line Molded Type (Cable to Cable)With SR Cable Length 5 Meters Max IP67 (Unmated) Stand Alone

Mating Part



Female Connector

In-line Molded Type (Cable to Cable)With SR Cable Length 5 Meters Max IP67 (Unmated) Stand Alone With SR Mating pair of connector NO.1 to 4

Accessories



Waterproof Cover With Chain



Waterproof Cover With Rubber Lead



Waterproof Cover

Waterproof Mini USB to Non-Waterproof **USB**

USB B Type(Female)



IEEE 1394 A TYPE

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications IEEE 1394 Connector

02. Description Panel Mount, Molded with Cable and

Field Installable

03. Current Rating 0.5A

04. Material Contacts: Copper Alloy, Gold Plated

Connector Body: PBT UL94V-0

05. Temperature Range -20°C to + 80°C

06. Waterproof Rating IP67(Per IEC60590), IP68

07. Contact Resistance ≤30MΩ Max

08. Insulation Resistance ≥100MΩ at DC 500V

09. Breakdown Voltage ≥AC 500V / 1 Minute

10. Standard Cable Length 1, 2,4M (IEEE1394A Cable) (for Molded Cable)

11. Speed 400Mbps

IEEE 1394 A Type Screw Type





Panel (Chassis) Mount

Connector NO.1



Male Connector PCB 180° IP68 (Unmated) Stand Alone

Features

Connector NO.3



LTW13-AABMFA-St 8001

Features

Male Connector Field Installable Without Cable IP68 When Mated

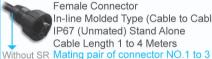
Connector NO.2

ITW13-AAPMEP-SC8001



Features Male Connector In-line Molded Type (Cable to Cable)With SR Cable Length 1 to 4 Meters IP67 (Unmated) Stand Alone

Mating Part



Female Connector In-line Molded Type (Cable to Cable)Without SR IP67 (Unmated) Stand Alone Cable Length 1 to 4 Meters

Accessories



Waterproof Cover With Chain



Waterproof Cover With Rubber Lead



Waterproof Cover With Fish Line

Waterproof **IEEE 1394 A** to Non-Waterproof **IEEE 1394 A**

1394 A Type(Female)





POWER CONNECTOR

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications Power Connector

02. Description Panel Mount, Molded with Cable and

Field Installable

03. Current Rating / Pin

Arrangements

8A:5 to 7

20A: 3

04. Material Contacts: Copper Alloy, Gold Plated

Connector Body: Nylon + GF, UL Recognized

05. Temperature Range Cable: -20°C to + 80°C

Connector Body: -40°C to +105°C

06. Waterproof Rating IP67(Per IEC60590)

07. Contact Resistance ≤20MΩ

08. Insulation Resistance ≥100MΩ at 250V DC

09. Durability 1000 Times

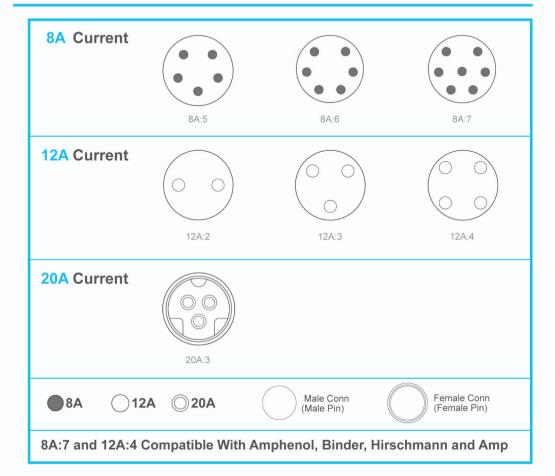
10. Breakdown Voltage ≥AC 1000V / 1 Minute

11. Standard Cable Length 1, 2, 5, 10M

(for Molded Cable) (Standard Cable: UL2464 PVC Jacket or Power Cable)

12. Field Installable All Solder Contacts Unless And Otherwise Indicated

POWER CONNECTOR



46 Power Connector Screw Type(8A)

Panel (Chassis) Mount

Connector NO.1



Features

Male Connector Front Mount IP67 (Unmated) Stand Alone $A \rightarrow 8A \cdot 5 \text{ to } 7$

Connector NO.2 Features



LTWPWE-1 PFFS-SC7001

Female Connector Front Mount IP67 (Unmated) Stand Alone \rightarrow 8A · 5 to 7

LTWPWE-1 PMMS-SC7001 **Mating Part**



Female Connector

In-line Molded Type (Cable to Cable or Cable to Field Installable) With SR

IP67 (Unmated) Stand Alone Cable Length 1 to 99 Meters 8A: 5 to 7

Mating pair of connector NO.1



Female Connector Solder Contacts

In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) Without Cable

IP67 When Mated 8A: 5 to 7

Mating pair of connector NO.1



Male Connector In-line Molded Type (Cable to Cable or Cable to Field Installable) With SR

IP67 (Unmated) Stand Alone Cable Length 1 to 99 Meters 8A: 5 to 7 Mating pair of connector NO.2

Male Connector Solder Contacts

In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) Without Cable

IP67 When Mated 8A: 5 to 7

Mating pair of connector NO.2



Power Connector *Screw Type(12A)*



Panel (Chassis) Mount

Connector NO.1 Features



LTWPWF-1 PMMS-SC7001

Male Connector Front Mount IP67 (Unmated) Stand Alone 1 →12A: 2 to 4

Connector NO.2 Features



LTWPWF-1 PFFS-SC7001

Female Connector Front Mount IP67 (Unmated) Stand Alone 1 →12A: 2 to 4

Mating Part



Female Connector In-line Molded Type (Cable to Cable or Cable to Field Installable) With SR

IP67 (Unmated) Stand Alone Cable Length 1 to 99 Meters 12A: 2 to 4

Mating pair of connector NO.1



Female Connector Solder Contacts In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) Without Cable

IP67 When Mated 12A: 2 to 4

Mating pair of connector NO.1



Male Connector In-line Molded Type (Cable to Cable or Cable to Field Installable) With SR

IP67 (Unmated) Stand Alone Cable Length 1 to 99 Meters 12A: 2 to 4

Mating pair of connector NO.2



Male Connector Solder Contacts In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) Without Cable IP67 When Mated

12A: 2 to 4 Mating pair of connector NO.2

MINI DIN SERIES

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications Mini Din

02. Description Panel Mount, Molded with Cable

03. Current Rating / Pin 1/ Arrangements

1A: 3 to 8

04. Material Contacts: Copper Alloy, Gold / Tin Plated

Connector Body: PBT UL94V-0

05. Temperature Range -20°C to + 80°C

06. Waterproof Rating IP66, IP67(Per IEC60590)

07. Contact Resistance ≤20MΩ Max

08. Insulation Resistance ≥50MΩ at DC 250V

09. Breakdown Voltage ≥AC 250V / 1 Minute

10. Standard Cable Length 1, 2, 5, 10M (Standard Cable: UL2464 PVC Jacket) **(for Molded Cable)**

MINI DIN SERIES CONNECTOR

	Male (Male Conn Female Pin)	Female (Female Conn Male Pin)
3 Contact		
4 Contact		
5 Contact		
6 Contact		
7 Contact		
8 Contact		

50

Mini DIN Series (Male)



Panel (Chassis) Mount

Connector NO.1 Features



Screw Type IP67 (Unmated) Stand Alone 1A: 3 to 8

Connector NO.2 Features



In-line Molded Type (Cable to Cable) With SR IP66(Quick) or P67(Scerw) (Unmated) Stand Alone Cable Length 1 to 99 Meters 1 →1A: 3 to 8

Mating Part



In-line Molded Type (Cable to Cable) With SR IP66(Quick) or P67(Scerw)

(Unmated) Stand Alone Cable Length 1 to 99 Meters

1A: 3 to 8

Mating pair of connector NO.1 & 2 (Screw Type)

With SI

Mating pair of connector NO. 2 (Quick Type)

Accessories



Waterproof Cover With Chain



DVI SERIES

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications DVI-D Single Link (DDS)

DVI-D Dual Link (DDD) DVI-I Single Link (DIS) DVI-I Dual Link (DID)

02. Description Panel Mount, Molded with Cable

03. Pin Arrangements DVI-D Single Link (DDS): 19 Contacts

DVI-D Dual Link (DDD): 25 Contacts
DVI-I Single Link (DIS): 23 Contacts
DVI-I Dual Link (DID): 29 Contacts

04. MaterialContacts: Copper Alloy, Gold Plated

Connector Body: Nylon + GF, UL Recognized

Shell: Steel, Nickel Plated

0 5 . Temperature Range Cable: -20°C to +80°C

Connector Body: -20°C to + 85°C

06. Waterproof Rating IP67(Per IEC60590)

07. Contact Resistance ≤20MΩ

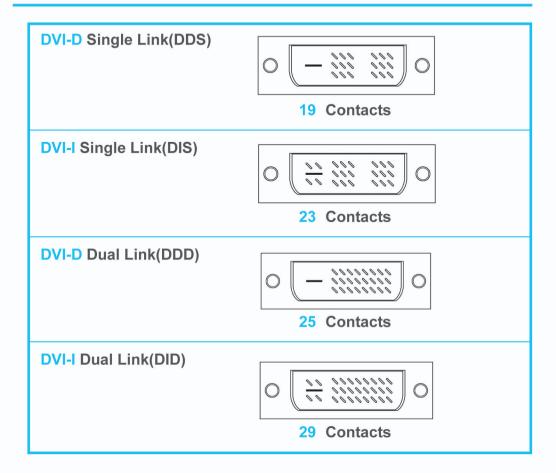
08. Insulation Resistance ≥1000MΩ at DC 500V

09. Standard Cable Length 1, 2, 5M

(for Molded Cable) (Standard Cable: UL20276 28 AWG / PVC)

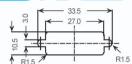
52 CONTACT PIN ARRANGEMENTS

DVI CONNECTOR



DVI-D (Digital) (Female)





Panel (Chassis) Mount

Connector NO.1 Features



DVI-D Single 19 Contacts or DVI-D Dual 25 Contacts Screw Type IP68 (Unmated) Stand Alone

Mating Part

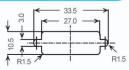


DVI-D Single 19 Contacts or DVI-D Dual 25 Contacts Screw Type In-line Molded Type (Cable to Cable) With SR IP67 (Unmated) Stand Alone



DVI-I (Analog / Digital) (Female)

Panel (Chassis) Mount



Connector NO.1



Features

DVI-I Single 23 Contacts or DVI-I Dual 29 Contacts Screw Type IP68 (Unmated) Stand Alone

Mating Part



DVI-I Single 23 Contacts or DVI-I Dual 29 Contacts Screw Type In-line Molded Type (Cable to Cable) With SR

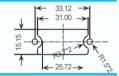
With SR



With SR

54

HDMI (Lock Type, 5A)



Panel (Chassis) Mount

Connector NO.1 Features



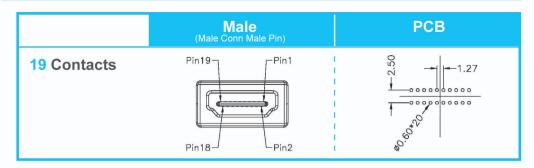
Latch Type 90° PCB IP67 (Unmated) Stand Alone

Mating Part



180° In-line Molded Type (Cable to Cable) With SR Maximum Cable Length 5M(Cable Specification HDMI 1.3) IP67 (Unmated) Stand Alone

PIN ARRANGEMENT / PCB LAYOUT





COAXIAL SERIES

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications Coaxial TNC Coaxial RCA

02. Description Panel Mount, Molded with Cable

03. Impedance TNC: 50Ω . 75Ω

04. MaterialContacts: Copper Alloy, Nickel Plated /

Gold Plated

Connector Body: Teflon (TNC), PBT (RCA)

0 5 . Temperature Range Cable: -20°C to + 80°C

Connector Body: -40°C to + 105°C

0 6 . Waterproof Rating IP66, IP67(Per IEC60590)

07. Contact Resistance RCA: ≤30MΩ

08. Insulation Resistance RCA: ≥100MΩ at DC 500V

TNC: ≥AC 500MΩ

09. Breakdown Voltage RCA: ≥AC 500V / 1 Minute

1 0 . Standard Cable Length 1, 2, 5, 10M (Standard Cable: RG58C / U or RG59U or UL1185 26#)

56 Coaxial Connector (Male)

Panel (Chassis) Mount

Connector NO.1



Features

TNC Connector 500 or 750 Screw Tyoe Solder Contact Front Mount IP67 (Unmated) Stand Alone

Connector NO.3 Features



TNC Connector 500 or 750 Screw Tyoe. Front Mount In-line Molded Type (Cable to Cable)With SR IP67 (Unmated) Stand Alone

Connector NO.2 Features



RCA Connector Quick Type In-line Molded Type (Cable to Cable)With SR IP66 When Mated

Mating Part



TNC Connector 50Ω or 75Ω Screw Tyoe In-line Molded Type (Cable to Cable)With SR IP67 (Unmated) Stand Alone

Mating pair of connector NO.1 & 3



RCA Connector Quick Tyoe In-line Molded Type (Cable to Cable)With SR IP66 When Mated Mating pair of connector NO.2

Accessories



Waterproof Cover With Chain



CABLE GLAND SERIES

NO. SPECIFICATIONS	STANDARD VALUE
01. Identifications	Cable Gland
02. Description	Field Installable
03. Thread Style	M8, M12, M16, M20, M25, M32, M40 PG7, PG9, PG11, PG13.5, PG16, PG29
04. Material	Connector Body:Nylon 66, UL Recognized UV Resistant
05. Temperature Range	-40°C to + 105°C
06. Waterproof Rating	IP67, IP68

58

Long Type (With SR:

Cable Gland (Field Installable)







Thread Style	Cable OD	Panel Thickness	With SR (Connector Length)	Without SR (Connector Length)	IP
M 12	Ф4.5 ~ Ф6.5mm	MAX 3.0mm	60.0mm	30.0mm	68
M 16	Ф6 ~ Ф10mm	MAX 7.5mm	78.0mm	45.0mm (UV)	68
M 20	Ф10 ~ Ф14mm	MAX 6.2mm	86.6mm	43.7mm	68
M 25	Ф13 ~ Ф18mm	MAX 6.2mm	96.0mm	52.1mm	68
M 32	Ф16 ~ Ф22mm ог Ф18 ~ Ф25mm	MAX 6.0mm		52.5mm	68
M 40	Φ20 ~ Φ25mm Φ24 ~ Φ32mm	MAX 9.0mm		60.0mm	68
PG 7	Ф4.5 ~ Ф6.5mm	MAX 3.0mm	60.0mm	30.0mm	68
PG 9	Ф6.0 ~ Ф10тт	MAX 7.5mm	78.0mm	45.0mm	68
PG 11	Ф6.0 ~ Ф10mm	MAX 6.0mm	79.1mm	48.3mm	68
PG 13.5	Ф10 ~ Ф14mm	MAX 6.2mm	86.6mm	49.6mm	68
PG 16	or Φ6.5mm(for RJ) Φ10 ~ Φ14mm	or MAX 4.5mm(for RJ) MAX 6.0mm	86.6mm	or 49.85mm(for RJ) 49.6mm	68
PG 29	Φ16 ~ Φ22mm Φ18 ~ Φ25mm	MAX 6.0mm	 	52.5mm	68

Short Type (With SR:

),(Without SR:



Thread Style	Cable OD	Panel Thickness	With SR (Connector Length)	Without SR (Connector Length)	IP
M 8	Ф2.5 ~ Ф3.0mm			22.0mm	67
M 16	Ф6 ~ Ф10mm	MAX 3mm		40.0mm	68
M 20	Ф10 ~ Ф14mm	MAX 6.2mm	79.6mm	36.7mm	68
M 25	Ф13 ~ Ф18mm	MAX 6.2mm	89.0mm	45.0mm	68
M 32	or Ф16 ~ Ф22mm Ф18 ~ Ф25mm	MAX 6.0mm		47.5mm	68
PG 16	Ф5.5 ~ Ф7.5mm(for RJ) or Ф10 ~ Ф14mm	 	 	or 45.0mm(for RJ) 44.6mm	68



LED SERIES

NO. SPECIFICATIONS STANDARD VALUE

01. IdentificationsPlastic LED
Metal LED

02. Description Panel Mount

03. LED Size Plastic LED: Φ3mm

Metal LED: Φ3mm, Φ5mm

04. Light Color Red, Blue, Green, White, Yellow

0 5 . Material Metal: Brass. Nickel 120u Plated

Plastic: ABS

06. Waterproof Rating IP67(Per IEC60590)

07. Operating -40°C to + 80°C **Temperature**

08. Breakdown Voltage 4V

09. Luminous Intensity (mcd / min)

	Ф 3mm	Φ 5mm
White	2100mcd	4150mcd
Red	1080mcd	2100mcd
Blue	1080mcd	4150mcd
Green	2950mcd	2950mcd
Yellow	700mcd	2100mcd

60 LED Waterproof Connector

Panel (Chassis) Plastic

Connector NO.1 Features



White Light Color IP67 (Unmated) Stand Alone

Connector NO.4 Features



Green Light Color IP67 (Unmated) Stand Alone

Connector NO.2 Features



Red Light Color IP67 (Unmated) Stand Alone

Connector NO.5 Features



Yellow Light Color IP67 (Unmated) Stand Alone

Connector NO.3 Features



Blue Light Color IP67 (Unmated) Stand Alone

Panel (Chassis) Metal

Connector NO.1 Features



LTV/L08-01V/AAS-MR7001(3 ITWI 08-01WBAS-MR7001(5

White Light Color Φ 3mm or Φ 5mm IP67 (Unmated) Stand Alone

Connector NO.4 Features



Green Light Color Φ 3mm or Φ 5mm IP67 (Unmated) Stand Alone

Connector NO.2 Features



LTWL08-01RBAS-MR7001(5)

Red Light Color Φ 3mm or Φ 5mm IP67 (Unmated) Stand Alone

Connector NO.5



Features

Yellow Light Color Φ 3mm or Φ 5mm IP67 (Unmated) Stand Alone

Connector NO.3 | Features



Blue Light Color Φ 3mm or Φ 5mm IP67 (Unmated) Stand Alone



DC AUDIO PLUG & JACK

NO. SPECIFICATIONS STANDARD VALUE

01. Identifications DCM: Mono Phone Jack

DCS: Stereo Phone Jack

02. Description Panel Mount, Molded with Cable

03. Plug Dimension Φ 2.5mm, Φ3.5mm

04. Waterproof Rating IP66

0 5 . Standard Cable Length 1, 2, 5, 10M (Standard Cable: UL2464 PVC Jacket) (for Molded Cable)

62 DC Audio Jack Snap-in Type

Panel (Chassis) Mount

Connector NO.1



Features

DC Mono Phone Jack Connector Ф 2 5mm Male Connector Panel Rear Mount

Connector NO.2 Features



LTWDCS-01RMFS-QC6001

IP66 When Mated



Connector NO.3 Features



LTWDCM-02RMFS-QC6001

DC Mono Phone Jack Connector Ф 3.5mm Male Connector Panel Rear Mount IP66 When Mated

Connector NO.4



ITWDCM-02AMFM-OL6AXX

Connector NO 5



LTWDCM-01AMFM-QL6AXX

Features

DC Stereo or Mono Phone Jack Connector Ф 3 5mm Male Connector In-line Molded Type (Cable to Cable)With SR

Cable Length Any Value IP66 When Mated

Features

DC Stereo or Mono Phone Jack Connector Φ 2.5mm. Male Connector In-line Molded Type (Cable to Cable)With SR Cable Length Any Value

IP66 When Mated

Mating Part



DC Stereo or Mono Plua Connector Φ 3.5mm(Stereo) or Φ 2.5mm Female Connector In-line Molded Type (Cable to Cable)With SR Cable Length Any Value IP66 When Mated Mating pair of connector NO.1, 2, 4, 5



DC Mono Plua Connector Ф 3.5mm Female Connector In-line Molded Type (Cable to Cable)With SR Cable Length Any Value IP66 When Mated Mating pair of connector NO.3 and 4

Cable Joiner Screw Type



Cable Joiner

Connector NO.1



Features

M20 2 to 4 Conductor Field Installable Wiring Gauge 16~22AWG Cable Range: Φ10mm, Φ62mm UV Resistant Temperature range: -40°C + 85°C

IP67 (Unmated) Stand Alone

Accessories



Junction Box

Junction Box

Connector NO.1 Features



A Size: 130 x 130 x 75 001 With Knockout Hole UV Resistant Up to 300 Hours (Max.) Temperature range: -40°C + 85°C IP67 (Unmated) Stand Alone

Accessories

M8, M12, M16, M20, M25, M32, M40 PG7, PG9, PG11, PG13.5, PG16, PG29

64

Low Profile Connector

Panel (Chassis) Mount

ed with Panel Connector 19 0mm Panel Size 32 3mm 2 0 mm

Connector NO_.1



Female Connector Lock Type, Sloder Contacts Panel Rear Mount Connector Rating 1A IP67 (Unmated) Stand Alone $A \rightarrow 8 \text{ or } 10 \text{ Pin}$

Connector NO.2



Lock Type, PCB Contacts Panel Rear Mount PCB 180° IP67 (Unmated) Stand Alone ITWPAA-1 REEP-I C7001 \rightarrow 8 or 10 Pin

Female Connector

Features

ITWPAA-1 REES-I C7001





Features

(Short Nut) LTWPAA- AMMM-KR7XXX \rightarrow 8 or 10 Pin Male Connector

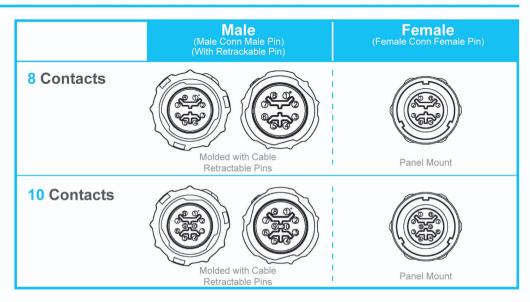
> In-line Molded Type (Cable to Cable)With SR Cable Length 1~99 Meters Cable Type UL2464 PVC Jacket IP67 (Unmated) Stand Alone Mating pair of connector NO.1 & 2

(Long Nut) LTWPAA- AMMM-LR7XXX



 $\uparrow \rightarrow 8$ or 10 Pin Male Connector, Lock Type In-line Molded Type (Cable to Cable)With SR Cable Length 1~99 Meters Cable Type UL2464 PVC Jacket IP67 (Unmated) Stand Alone Mating pair of connector NO.1 & 2

LOW PROFILE CONNECTOR PIN ARRANGEMENT



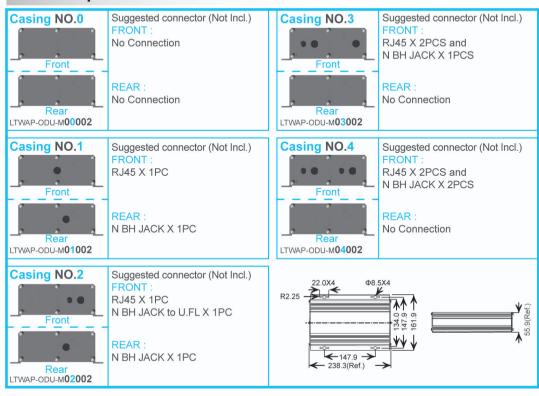


AP BOX SERIES

NO. SPECIFICATIONS 0 1 . Identifications	STANDARD VALUE AP-02, AP-03, AP-04, AP-06, AP-07
02. Casing Material	AP-02: Aluminum Rectangular AP-03: Light Gray Aluminum Square, Unpainted Bottom AP-04: White Aluminum Square, Painted Bottom AP-06: Aluminum Square, Unpainted Bottom AP-07: Aluminum Square, Painted Bottom
03. Cover Material	AP-02: Metal AP-03, 04, 06, 07: Metal or Plastic
04. Accessory	AP-02: SPCC Accessories AP-03: SPCC Accessories AP-04: SPCC Accessories AP-06: SUS Accessories AP-07: SUS Accessories
05. Waterproof Rating	IP65, IP67

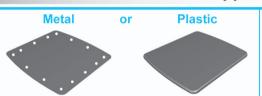
66 Aluminum Rectangular (AP-02), (IP65)

Choose Option 1 of 5



Aluminum Square (AP-03, 04, 06, 07), (IP67)

Metal Aluminum or Plastic Upper Cover





Unpainted (AP-03, 06) or Painted (AP-04, 07)

Aluminum *Square* (AP-03, 04, 06, 07), (IP67)

Choose Option 1 of 5



Suggested connector (Not Incl.) FRONT .

No Connection

RFAR .

No Connection



Suggested connector (Not Incl.) FRONT

RJ45 X 2PCS and N BH JACK X 1PCS

RFAR ·

No Connection



LTWAP-ODU-10100/2

Suggested connector (Not Incl.) FRONT:

R.145 X 1PC

REAR:

N BH JACK X 1PC



ITWAP-ODU-10300/2

Suggested connector (Not Incl.) **FRONT**

R.I45 X 2PCS and N BH JACK X 2PCS

REAR :

No Connection



Suggested connector (Not Incl.) FRONT:

RJ45 X 1PC

N BH JACK to U.FL X 1PC

REAR .

N BH JACK X 1PC

ITWAP-ODU-10X00/2

LTWAP-ODU-10400/2

↑→M (Metal Upper Cover) or P (Plastic Upper Cover) 2 → 3, 6(AP-03, 06)Unpainted or 4, 7(AP-04, 07)Painted

Mounting Kit for Square



Features

With SPCC Mounting Kit and Accessory(AP-03, 04)

With SUS Mounting Kit and Accessory(AP-06, 07)

Rectangular & Square **Accessories**





Dummy Cover for RJ45



panel cover for RF Conn.(N-Type)

About LTW®

Company Name LTW TECHNOLOGY CO., LTD.

Established
March 1993

Headquarters 9F, NO. 657-12, Jungjeng Road, Shinjuang City, Taipei Hsien 242, Taiwan, R.O.C.

Total Number of Manpower 800 employees

Certification ISO9001:2000, ISO14001:1996, CE, UL. JIS. RoHS

Type of Business Design, Manufacturer and Exporter



Taiwan Head Quarters:

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Why LTW®?

- Design & manufacture waterproof connectors
- Cable assembly manufacturer FMS Provider
- "Total Solution Provider" from in-house design, tooling, plastic injection molding, PCBA, Packaging, QA to logistics......
- ISO9001 & ISO14001 certified manufacturer
- Accept OEM & ODM requests
- Swift introduction and rapid progression for products-to-market
- **7** ROHS, CE, UL, JIS certified compliant
- Products are protected by international patents
- Extensive range of waterproof connectors for broad applications
- Competitive pricing
- Small quantity orders are accepted
- On-time delivery
- "Customer Satisfaction First" Policy
- Multi-languages speaking sales representatives & engineers
- Prompt response
- Highly qualified, committed and motivated workforce



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