

Amphenol

COMMUNICATIONS SOLUTIONS

BergStak[®] 0.50mm Connector Presentation

 **FCi Basics**

Industry recognized portfolio combining leading edge technologies and proven solutions

Wire to Board Core	Wire to Board eMobility	Input Output FFC FPC	Backplane	Board to Board
<p>BergStik® Minitek® PV® Dubox® Quickie®</p>	<p>MicroSpace™ MicroSpaceXS™ FlexLock™ MicroSpace™ High Voltage WireLock®</p>	<p>Clincher® SFW®-SFV USB HDMI Modular Jack Universal Contacts USB Cable Assembly</p>	<p>Metral® DIN41612 Millipacs® HPC</p>	<p>MezzoStak® BTFW MicroSpeed® Conan® BergStak®</p>

Leading Product Portfolio For Strategic Markets

Automotive
BMS, Lighting ,OBC, ADAS

Industrial
PLC/Controls, ESS, Metering

IT/Datacom
Servers, Storage, AI, Embedded

Consumer
Home Automation, Appliances

Structured To Make Customers Succeed

Value Add Solutions
Tailormade Cable Assemblies

Custom Competence
Design Local; Build Regional

Global Footprint
China; France; India; Mexico; Malaysia

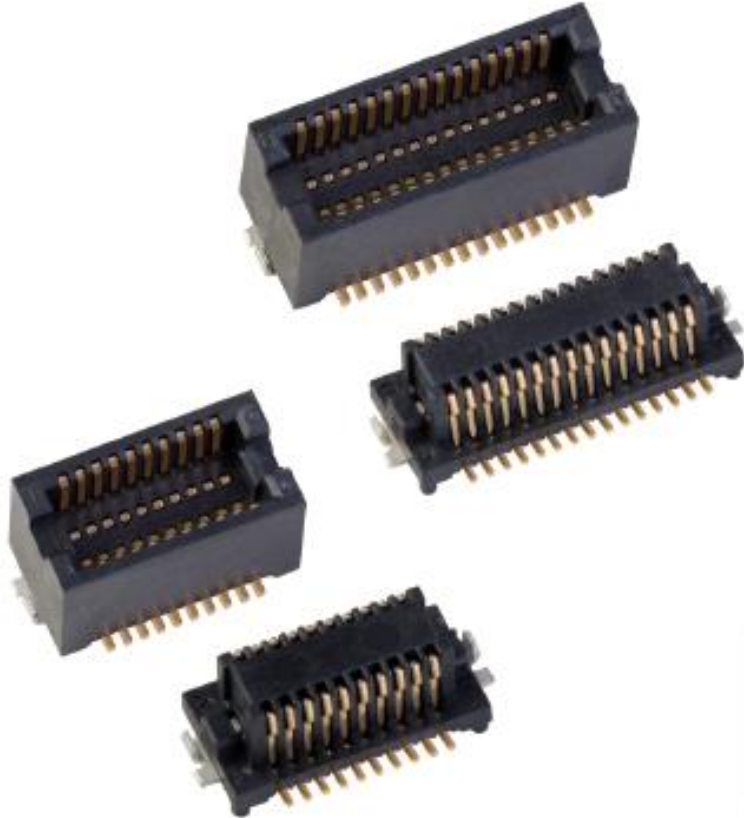
Technology & Innovation
Dedicated Basics Engineering Teams

Agenda: BergStak[®] 0.50mm Board to Board Connector

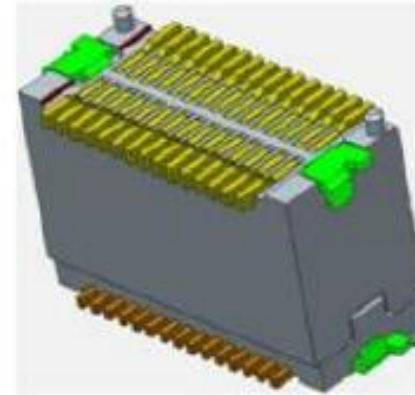
- Value Proposition
- Product Overview
- Product Specifications
- Features & Benefits
- Part Numbers
- Markets & Application
- Marketing tool

- BergStak® 0.50mm New Height is a comprehensive and versatile solution designed for high-density application able to cover all the needs.
- The BergStak® 0.50mm New Height presently has a stack height of 3-6mm with 10-80 positions, and 7-8.5mm with 10-100 positions
- BergStak® 0.50mm New Height is a double row, mezzanine connector system with **surface-mount** solder tails
- BergStak® 0.50mm New Height connectors are ideal for applications in the **Consumer: Digital Video Camera; Industrial: Measurement Equipment, Mobile Payment Device, Point of Sales Equipment, Portable Industrial Terminal, Surveillance Camera; Medical: Medical Device**

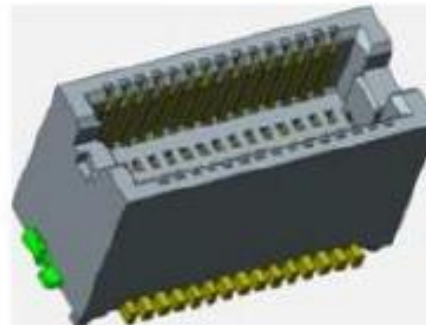
BergStak® 0.50mm - Solution Overview



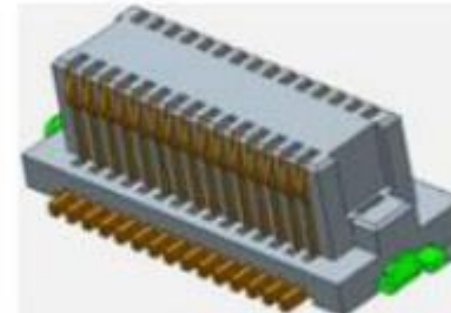
Intermating Overview



Plug Overview



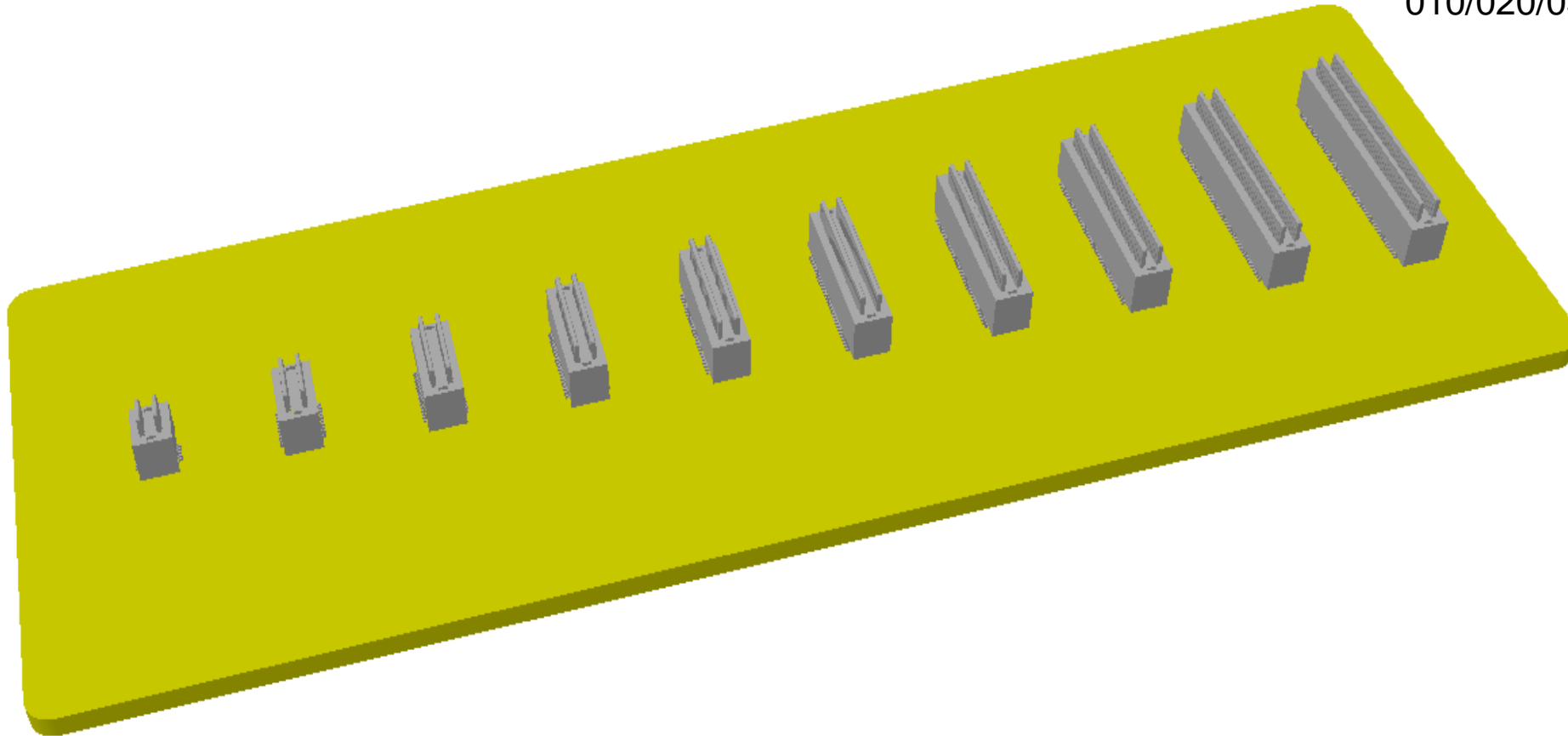
Receptacle Overview



BergStak® 0.50mm - Solution Overview

Header

Header for 4mm stack height
P/N: 10165430-1 XXX 00LF
Position(XXX):
010/020/030/040/050/060/070/080/090/100



BergStak® 0.50mm - Solution Overview

Receptacle

Receptacle for 3mm, 3.5mm, 4.0mm,
4.5mm stack height

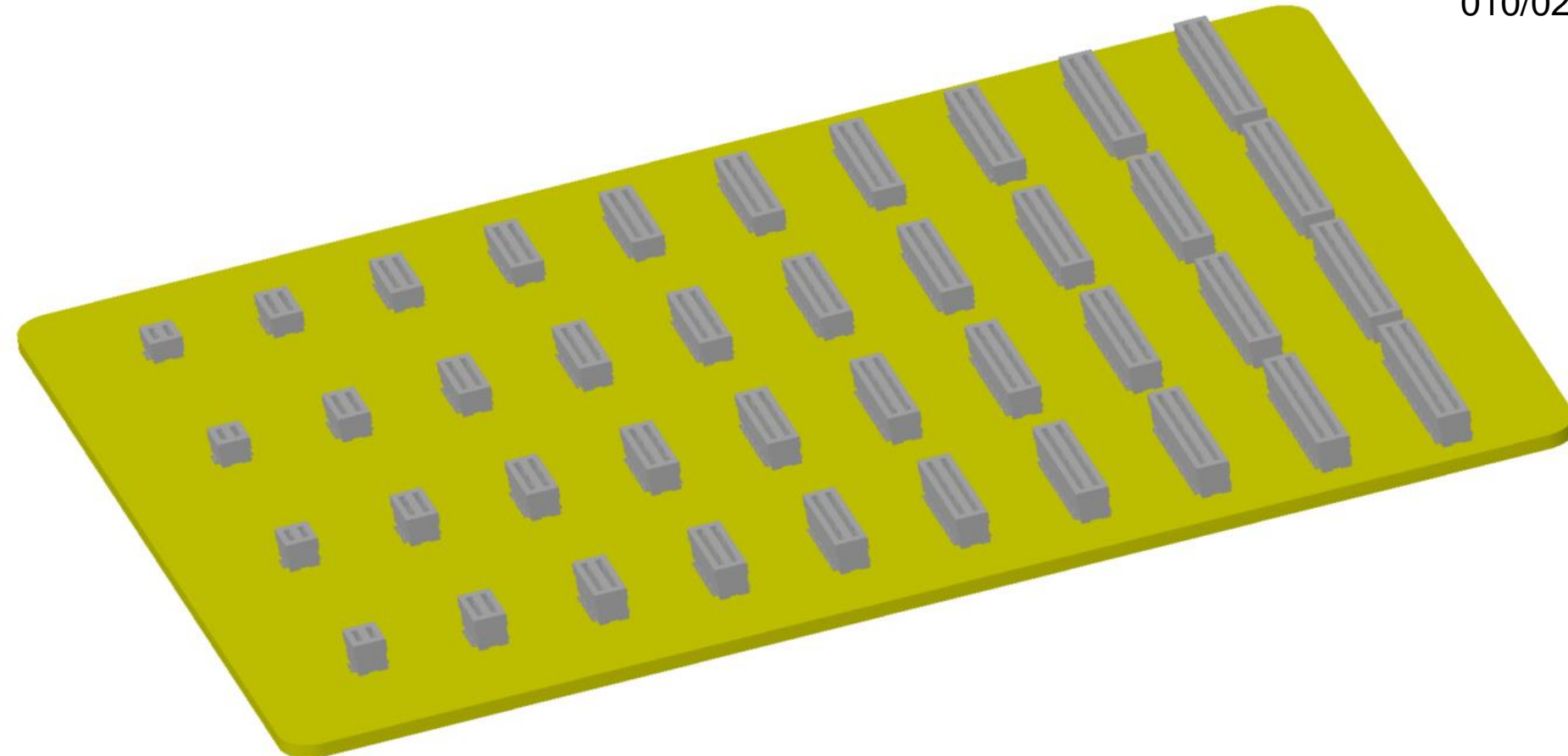
P/N: 10165431-X XXX 00LF

Height(X):

1: 3mm; 2: 3.5mm; 3: 4.0mm; 4: 4.5mm

Position(XXX):

010/020/030/040/050/060/070/080/090/100



BergStak[®] 0.50mm - Product Specifications

Specifications

- Pitch: 0.50mm
- Positions:
 - 3-6mm height: 10 ~ 80pos
 - 7-8.5mm height: 10 ~ 100pos
- Termination: SMT
- Configurations: Vertical
- USCAR, UL E66906
- Speed: up to 2G/bps

Materials

- Housing: High temperature thermoplastic LCP, Black (UL94V-0)
- Terminal: Copper Alloy
- Hold down: Copper Alloy
- Plating: Gold Flash

Electrical Performances

- Operating Voltage Rating = 30 VDC
- Current Rating: 0.5A all contacts powered
- Durability: 50 mating cycles
- Insulation Resistance: 500MΩ min.

Mechanical Performance

- Durability: 50 cycles
- Mating Force: 1.47N max./contact
- Un-mating Force: 0.15N min./contact
- High Temperature Life: 85c+/-5c for 96 hours

Environmental

- Operating Temperature: -40°C to +125°C
- MFG:EIA 364-65 Class –IIA compatible

Packaging

- Tape and reel

Features	Benefits
0.5mm double row contacts	High density connector, suitable for applications with space constraints
Scoop-proof housings	Ensures terminals are not damaged during mating
Locating pegs option	Eases manual assembly
3mm to 6mm stack heights in 0.5mm increments 10 to 80 positions in 10 position increments 7mm to 8.5mm stack heights in 0.5mm increments 10 to 100 positions in 10 position increments	Wide range of sizes and stack heights supports different applications
RoHS compliant, halogen and lead free	Meets environmental, health and safety requirements
UL94V-0 high temperature LCP material	With-stand harsh environment

BergStak® 0.50mm – Part numbers

Header/ 10132797

10132797- AA B C D E F LF

AA	POSITION	B	DESCRIPTION	D	POLARIZATION PEG	HOLD DOWN	E	PACKAGING	F	CUSTOMER CODE
01	2X05	1	PLUG 1	0	YES	YES	0	TAPE AND REEL WITHOUT CAP	BLANK	STANDARD P/N
02	2X10	2	PLUG 2	1	NO	YES			V	APPLY FOR SPECIAL CUSTOMER
03	2X15	3	PLUG 3	2	YES	NO				
04	2X20	4	PLUG 4	3	NO	NO				
05	2X25	5	PLUG 5							
06	2X30	6	PLUG 6							
08	2X40	7	PLUG 7							

C		PLATING: CONTACT AREA/SOLDER TAIL AREA	
1		1~3u" Au ON CONTACT AREA OVER 50u" Ni Min GOLD FLASH ON SOLDER TAIL OVER 50u" Ni Min	

10132797 SERIES (PLUG SERIES)				
	Plug 1	Plug 2	Plug 3	Plug 4
COMBINATION OF MATED HEIGHT 3.0~4.5mm				
10132798 SERIES (REC. SERIES)	Recep 1			
COMBINATION OF MATED HEIGHT 5.0~6.0mm	Plug 5	Plug 6	Plug 7	
10132798 SERIES (REC. SERIES)	Recep 2			

Receptacle/ 10132798

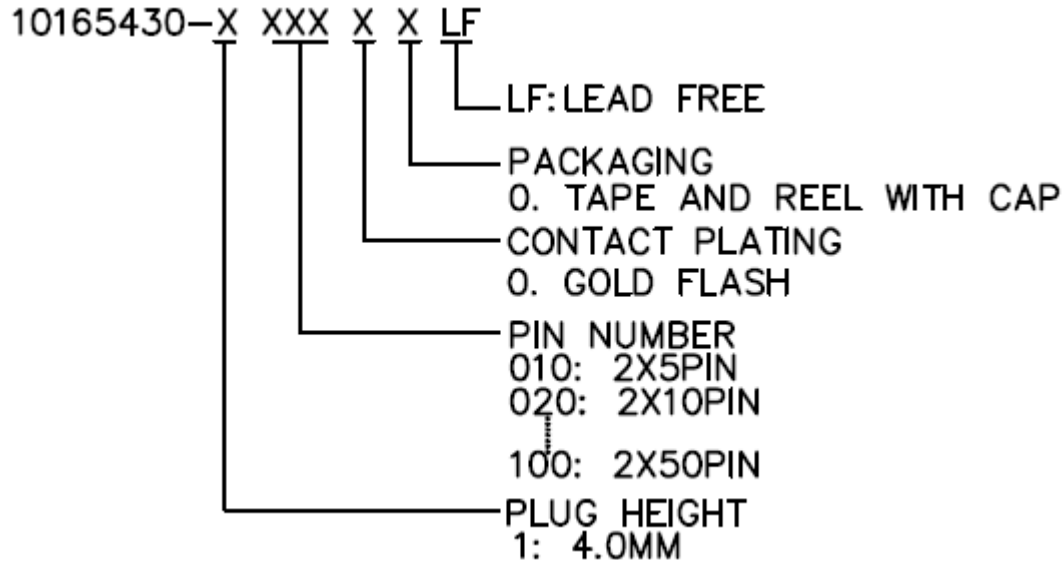
10132798- AA B C D E F LF

AA	POSITION	B	DESCRIPTION	D	POLARIZATION PEG	HOLD DOWN	E	PACKAGING	F	CUSTOMER CODE
01	2X05	1	RECEPTACLE 1	0	YES	YES	0	TAPE AND REEL WITHOUT CAP	BLANK	STANDARD P/N
02	2X10	2	RECEPTACLE 2	1	NO	YES			V	APPLY FOR SPECIAL CUSTOMER
03	2X15			2	YES	NO				
04	2X20			3	NO	NO				
05	2X25									
06	2X30									
08	2X40									

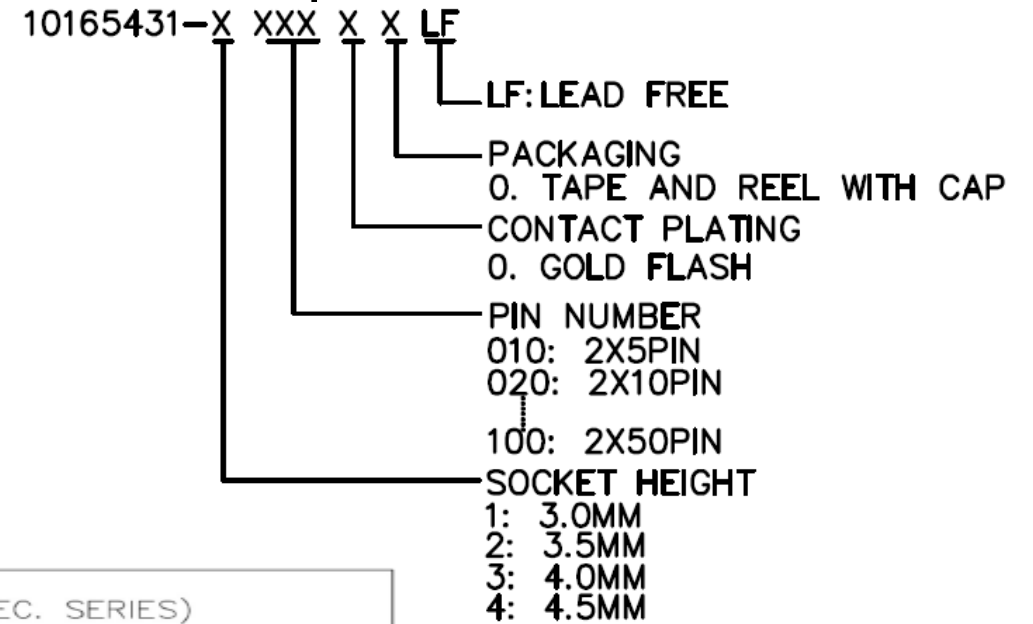
C		PLATING: CONTACT AREA/SOLDER TAIL AREA	
1		1~3u" Au ON CONTACT AREA OVER 50u" Ni Min GOLD FLASH ON SOLDER TAIL OVER 50u" Ni Min	

BergStak® 0.50mm – Part numbers

Header/ 10165430



Receptacle/ 10165431



		10165431 SERIES (REC. SERIES)			
		REC. 1	REC. 2	REC. 3	REC. 4
	COMBINATION OF MATED HEIGHT 7.0~8.5mm				
10165430 SERIES (PLUG SERIES)	PLUG. 1				

BergStak® 0.50mm – Markets and Applications

Consumer

- Digital Video Camera



Medical

- Medical Device



Industrial & Instrumentation

- Point of Sales Equipment
- Mobile Payment Device
- Surveillance Camera
- Portable Industrial Terminal
- Test Equipment
- Measurement Equipment



- Samples available (check with sample room Tatabanya : samples.global@amphenol-eu.com)
- Website quick link: [Landing Page](#)
- Available on website
 - Drawings
 - 3D Models
 - Datasheet
 - Product specifications
 - Product presentation



If you have any enquires, please contact to us:
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PLM Contact: Feagle.Pan@fci.com

Thank You

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