

Modernized Rolling Stock Solution for Railway Infrastructure System

Modularized design for railway solutions

- ✓ CCTV-in-train Surveillance System
- ✓ Passenger Information System
- ✓ Vehicle Monitoring System



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Enabling an Intelligent Planet



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Comprehensive Rolling Stock Offerings for Rail

Advantech provides a diverse product line especially for rolling stock solutions. From cameras, switches, and driver interfaces, to on-board displays and controllers, all specifically aimed at rolling stock applications, including Ethernet Train Networks, Passenger Information Systems (PIS), CCTV systems, and Vehicle Monitoring Systems. Advantech in-train products are EN 50155 and EN50121-3-2 railway standard certified, which enable them to withstand high levels of vibration and enhance their operating longevity.

Advantages & Key Features



High Performance



Expansion Flexibility



Compact Size



Conformal Coating



Robust Design



Communication

Certification



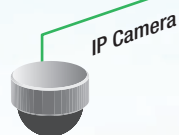
EKI-9512E 4GETR

EKI-9516
Train Managed Switch



ITA-5612
Network Video
Recorder

Public Address
System



IP Camera

Door

Way Solution

CCTV-in-train Surveillance System

CCTV in-train surveillance system has large media storage expansion capability and stable connection to IP cameras, which records events and enhances the security and safety of passengers.



EKI-9512E 4GETR
Ethernet Train
Backbone Switch



EKI-9516
Train Managed Switch



ITA-5231
x86 On-Board Server



IP Camera



ARS-P3800
Passenger Information
System

Welcome

Door

ITA-5831
x86 On-Board
Controller



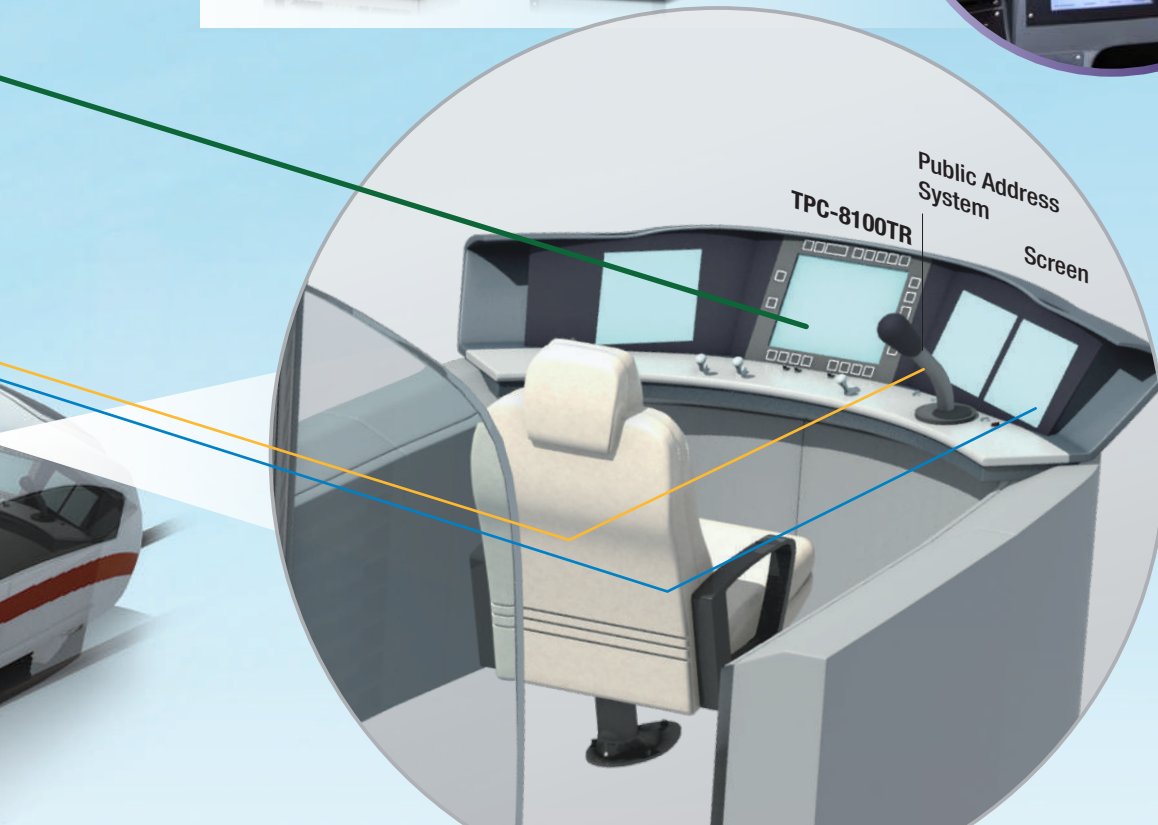
Passenger Information System

PIS provides passenger relevant data including arrival & departure information, entertainment content, public address and emergency announcements.



Vehicle Monitoring System

Vehicle Monitoring Systems (VMS) are an interface to collect system status and failure data from vehicle sub-systems and components, and display train configuration and VMS information on displays in each cab.



Advantech's Proven Success in Transportation

Whether it's a railway, freeway, airport or any other transportation system, Advantech is dedicated in its effort to provide the most stable, intelligent transportation systems for cities anywhere in the world. We are specialized in technical know-how and equipped with the domain knowledge needed to build transportation systems on the basis of individual needs and requirements. With decades of experience, our product offering for transportation has evolved into a solid portfolio of solutions. Today, we have an impressive selection of successful case stories that we are proud to share with you. Advantech is and always will be by your side, continuously delivering total solution packages to our partners and customers around the world.



Selection Guide



Part Number	ITA-5831	ITA-5231	ITA-5612
CPU	Intel® Core™ i7/i5/Celeron G3902	Intel® Core™ i7-6822EQ/i5-6442EQ/Celeron® G3902	Intel Atom X7-E3950
Memory	8GB on board memory		4 GB on board, max 8GB
Graphics	1 x DVI-I, 1 x VGA, 1 x HDMI		1 x DVI-I
Ethernet	Up to 3 x M12 X-coded(F)		1x GbE + 2 POE M12 X-code (POE version) 2 x GbE M12 X-code (value version)
USB	2 x USB3.0 1 x USB2.0 M12 Connector		2 x USB 3.0 type A 1 x USB 2.0 pin header
Expansion	3 x Mini PCIe Socket 2 x SIM slot	3 x Mini PCIe Socket 2 x SIM slot	1 x iDoor 1 x Mini PCIe w/ 1 SIM card holder
Storage	Max to 3 x 2.5" SSD(9.5mm) 1 x mSATA slot on board	Max to 4 x 2.5" SSD(9.5mm) 1 x mSATA slot on board	2 x 2.5" SSD mSATA (optional)
Power Supply	DC 24V input (Optional DC 48/72/110V input)		
Operating Temperature	-40~70° C		
Dimension	220 x 198 x 88 mm	427 x 88 x 200 mm	210 x 205 x 71.7mm



Part Number	ARS-P3800	
Display	Display Type	38" TFT LCD panel
	Max Resolution	1920 x 540
Computing system	CPU	AMD®G-Series Embedded SoC GX-217GA processor
	Memory	DDR3 1600MHz 204-pin SODIMM (up to 8GB)
I/O	USB	1 x USB 2.0 (M12 A-codes), 1 x USB 2.0 (Type A)
Storage	mSATA	1 x mSATA SSD (Default 64GB)
Power Supply	Connector	M12 with 4 poles
	Power Input Voltage	110 VDC (+ -40%)
Operating Temperature	-40~85° C	
Dimension	1065 x 334 x 63mm	

Part Number	TPC-8100TR
CPU	Intel® Cedar Trail Dual core processor 1.6G
Memory	DDR3 Max 4GB
Graphics	Integrated Intel GMA 3600 series, supports DirectX 9 and OpenGL3.0 supports HW Accelerated Decode: MPEG2, H.264, VC-1
Ethernet	2X GbE M12 Connector
Storage	Built in 16G CFast card
Power Supply	110 VDC, 96 VDC, 72 VDC, 48 VDC (option), 37.5 VDC (option), 24 VDC (option)
Operating Temperature	-30~70°C
Dimension	227 x 345 x 85 mm



Part Number	EKI-9500 Series
EKI-9516/9512-WV	16/12-Port Gigabit Managed Ethernet Switch
EKI-9516P/9512P-HV	16/12-Port Gigabit Managed Switch with PoE/PoE+, high voltage
EKI-9516P/9512P-LV	16/12-Port Gigabit Managed Switch with PoE/PoE+, low voltage
EKI-9516D/9512D-WV	16/12-Port 10/100 Mbps Managed Ethernet Switch
EKI-9516DP/9512DP-HV	16/12-Port 10/100 Mbps Managed Switch with PoE/PoE+, high voltage
EKI-9516DP/9512DP-LV	16/12-Port 10/100 Mbps Managed Switch with PoE/PoE+, low voltage

Part Number	CPCI
MIC-3328	Intel® 3rd Generation Core™ processor blade
MIC-3329	Intel® Quad-Core Atom™ SoC processor blade
MIC-3680	2-port Isolated CAN communication blade
MIC-3955	4-port RS-232/422/485 communication blade
MIC-3957	GPS carrier blade
MIC-3958	4-port RJ45/M12 Gigabit Ethernet blade

Regional Service & Customization Centers

China Kunshan
86-512-5777-5666

Taiwan Taipei
886-2-2792-7818

Netherlands Eindhoven
31-40-267-7000

Poland Warsaw
00800-2426-8080

USA Milpitas, CA
1-408-519-3898

Worldwide Offices

Greater China

China

Toll Free	800-810-0345
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Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118

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Xindian	886-2-2218-4567
Taichung	886-4-2329-0371
Kaohsiung	886-7-229-3600

Middle East and Africa

Israel	072-2410527
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Asia

Japan

Toll Free	0800-500-1055
Tokyo	81-3-6802-1021
Osaka	81-6-6267-1887
Nagoya	81-52-856-9657

Korea

Toll Free	080-363-9494
Seoul	82-2-3663-9494

Singapore

Singapore	65-6442-1000
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Malaysia

Kuala Lumpur	60-3-7725-4188
Penang	60-4-537-9188

Thailand

Bangkok	66-2-248-3140
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India

Bangalore	91-80-2545-0206
Pune	91-20-3948-2075

Indonesia

Jakarta	62-21-751-1939
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Australia

Toll Free	1300-308-531
Melbourne	61-3-9797-0100

Europe

Germany

Toll Free	00800-2426-8080/81
Munich	49-89-12599-0
Düsseldorf	49-2103-97-855-0

France

Paris	33-1-4119-4666
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Italy

Milano	39-02-9544-961
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Benelux & Nordics

Breda	31-76-523-3100
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UK

Newcastle	44-0-191-262-4844
London	44-0-870-493-1433

Poland

Warsaw	48-22-31-51-100
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Russia

Moscow	8-800-555-01-50
St. Petersburg	8-800-555-81-20

Czech Republic

Ústí nad Orlicí	420-465-521-020
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Ireland

Oranmore	353-91-792444
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Americas

North America

Toll Free	1-888-576-9668
Cincinnati	1-513-742-8895
Milpitas	1-408-519-3898
Irvine	1-949-420-2500
Ottawa	1-815-434-8731

Brazil

Toll Free	0800-770-5355
São Paulo	55-11-5592-5355

Mexico

Toll Free	1-800-467-2415
Mexico City	52-55-6275-2727

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Please verify specifications before quoting. This guide is intended for reference purposes only.

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