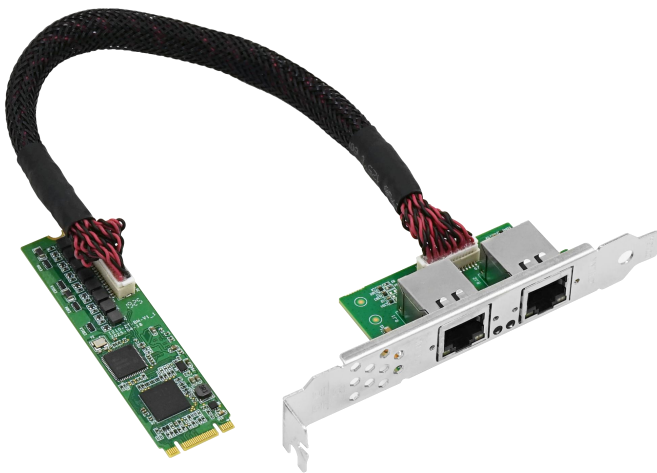# LRES2041PTI-2RJ45

M.2 BM 1G Dual-port Adapter

FCC CE RoHS

Key Features：

- PCI Express 2.1 x1

- Dual-port RJ45 interfaces

- M.2(B + M Key)

-Support 1000/100/10Mbps

-Support 1588 PTP

Overview

The LRES2041PTI-2RJ45 is a dual-port Gigabit Ethernet adapter independently developed by Linkreal Co., Ltd., based on the Intel® I210 controller. Featuring an M.2 B+M Key interface, it supports stable and reliable 10/100/1000 Mbps network connections. With its PCIe 2.1 x1 interface to the host system, the adapter offers excellent compatibility and low power consumption.

The adapter adopts a modular split design, consisting of two parts: an integrated dual RJ45 network port module, and a compact M.2 2280 (B+M Key) sub-board connected via a dedicated cable. This flexible architecture allows deployment in space-constrained or structurally customized system environments.

In addition to delivering high-speed and stable data transmission, the adapter ensures broad compatibility, meeting the stringent demands of industrial automation and embedded systems for real-time performance, stability, and efficiency. It serves as an ideal network connectivity solution for industrial automation, intelligent manufacturing, edge computing, and a wide range of embedded applications.

Specifications

Model	LRES2041PTI-2RJ45
Controller	Intel I210
Adapter Type	M.2 Ethernet Adapter
Form Factor	2280(M.2 B+M Key)
Host Connector	PCIe2.1 x1
Connectors	RJ45
Port	Dual
Link Speed	1000/100/10Mbps
Protocol Support	IEEE 802.3 (10BASE-T, 100BASE-TX, 1000BASE-T) IEEE 802.3, 802.3u, 802.3ab PHY specifications compliant IEEE 802.3 autonegotiation IEEE 802.3x and IEEE 802.3z compliant flow control IEEE 1588 protocol and 802.1AS implementation IEEE 802.3az - Energy Efficient Ethernet (EEE)
PXE/UEFI	No
WoL	No
SR-IOV	No
1588 PTP	Yes
Jumbo Frames	9.2KB

LED Indicators

LED Type	Color/Behavior	Note
Speed	Off	10Mbps
	Amber	100Mbps
	Green	1000Mbps
Link/Activity	Off	No Link
	Green	Link
	Green(blink)	Link up(traffic flowing)

Supported Physical Layer Interfaces

Cabling	CAT3 or higher for 10BASE-T
	CAT5 or higher for 100BASE-TX operation
	CAT5e or higher for 1000BASE-T operation

Supported Operating System

Windows   Windows Server   Deepin   RHEL/CentOS   Ubuntu   SUSE   FreeBSD   Fusion OS
Kylin OS   Neo Kylin OS   OpenKylin OS   NewStart OS   UOS   Fangde OS   Rocky   OpenEuler
Debian   VMwareESXi   iKuai Routing OS

Technical Specifications

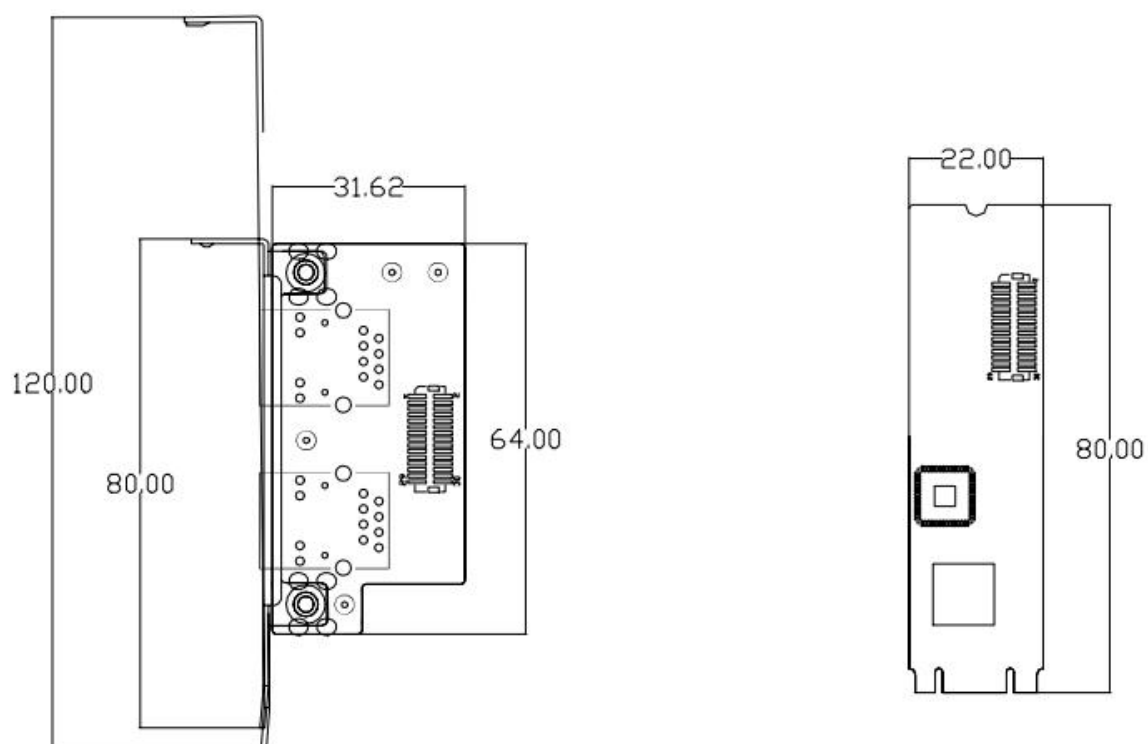|	
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C
Storage Humidity	Maximum: 90% non-condensing relative humidity at 35 °C
Certification	FCC,CE,RoHS

Physical Properties

PCB Size(Unit:mm)	80*22
Package Size (Unit: mm)	179*150*30

Packing List

Internet Network Adapter	*1
Product Warranty Card	*1
Packaging	Carton + Anti-static bag

Dimensions(unit:mm)

Revision History

LRES2041PTI-2RJ45;June 16, 2025

Initial release.V1.0