

Model: UT-6410GCM

(Product Name: 10-port managed gigabit ethernet switch)

# **User Manual**



## **UTEK TECHNOLOGY (SHENZHEN) CO., LTD.**

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### 1.Overview

The UT-6410GCM series is a managed industrial Ethernet switch that supports 2 Gigabit optical ports and 8 Gigabit electrical ports, as well as a console port for CLI management. It supports Ethernet Layer 2 protocols required by the industrial field to ensure communication network stability. This series of switches adopts low-power and fanless design to ensure no noise interference, and also supports -20 $^{\sim}75$  °C operating temperature and good EMC electromagnetic compatibility performance, ensuring stable operation in harsh industrial environments. It provides a safe and reliable solution for building fast and stable network terminal access networks in industrial application fields such as factory automation, intelligent transportation, and video surveillance.

## 2. Major Functions & Features

- Supports different combinations of fast Ethernet ports and optical ports (supports ST/FC/SC/SFP interface types)
- Supports IGMP Snooping to filter multicast packets
- Supports web configuration for optional 100Base-FX, 1000Base-X mode types
- Supports IEEE 802.1Q VLAN for easy network planning
- Supports QoS to implement real-time traffic classification and priority
- Supports STP/RSTP/MSTP and ERPS network redundancy functions to prevent network storms
- Supports UT-Ring private ring network function
- Supports SNMPv1/v2/v3 for network management at different levels
- Supports trap and RMON for flexible network monitoring
- Supports IEEE802.1x authentication function
- Supports link aggregation to optimize network bandwidth
- Supports port isolation and ACL to enhance network management flexibility and security
- Supports port mirroring function for online debugging
- Supports DHCP Server for assigning IP addresses with different policies
- Supports port limiting, broadcast storm suppression, multicast storm suppression, unknown unicast storm suppression to ensure network stability
- Supports LLDP, Link flap, UDLD, DDM and loop detection related link detection functions, facilitating on-site problem solving during construction.
- Supports wide temperature range working from -40-70℃

## 3. Technical parameters

#### Standards

IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3z,

IEEE802.1Q, IEEE802.1p, IEEE802.1D, IEEE802.1W,

IEEE802.1s, IEEE802.3ad, IEEE802.1x

Protocols: ARP, ICMP, TCP, HTTP, HTTPS, Telnet, STP/RSTP/

MSTP, LLDP, IGMP, SNMPv1/v2c/v3, DHCP Server,

ERPS, UDLD, NTP, RMON, Syslog

Flow Control: IEEE802.3x flow control, Backpressure flow control

#### Interfaces



### Your Reliable Partner in Industrial IoT

Optical Interface: 100Base-FX/1000Base-X ports (SC/FC/ST/SFP slots)

RJ45 Interface: 10/100/1000Base-T port, MDI/MDI-X adaptive

**LED Indicators:** 

Power indicator, optical port indicator, RJ45 indicator, operation indicator

#### **Transmission Distance**

Cat5e twisted pair cable: 100m

Fiber optic jumper:

Single-mode: 1310nm 20/40/60Km, 1550nm 80/100/120Km

Multi-mode: 1310nm 2Km

#### **Switching Performance**

Forwarding rate: 1488095pps

Transmission mode: Store and forward

MAC address space: 8K Buffer space: 4.1Mb

Backplane bandwidth: 22G Maximum frame length: 10KB

#### **Power Requirements**

Input voltage: 12/24/48VDC (10.8~52.8VDC), reverse protection supported

Power consumption:

Maximum input power 280mA@24Vmax (for detailed product power consumption, please refer to the product label)

### **Mechanical Characteristics**

Housing: IP40 protection level

Installation method: DIN-rail/wall-mount installation

Size (W x H x D): 150mm x 47.6mm x 100mm Packaging size: 250mm x 205mm x 55mm

Weight: 795g

#### **Operating Environment**

Operating temperature:  $-20^{\circ}$  C ~75 $^{\circ}$  C Storage temperature:  $-40^{\circ}$  C ~85 $^{\circ}$  C

Relative humidity: 0~95% (non-condensing)

### **Industry Standards**

EMI:

FCC Part 15, CISPR (EN55022) class A

EMS:

IEC(EN)61000-4-2(ESD),

IEC(EN)61000-4-3(RS),

IEC(EN)61000-4-4(EFT),

IEC(EN)61000-4-5(Surge),

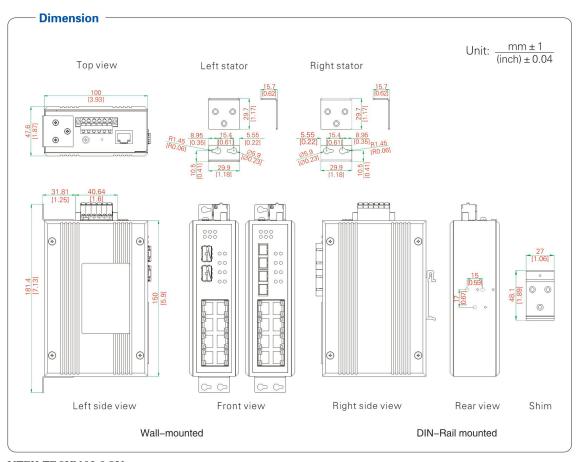


IEC(EN)61000-4-6(CS), IEC(EN)61000-4-8, IEC 60068-2-27(Shock), IEC 60068-2-32(Freefall)

## 4. Appearance



## 5. Structure dimensions





# 6. Orderings

Model	Interface description		Ontical nort type
	1000Base-X	10/100/1000Base-T	Optical port type
UT-6410GCM-8GT2GP	2	8	SFP slot
UT-6410GCM-8GT2GSC	2	8	SC optical port
UT-6410GCM-8GT	-	8	-

### Note:

1. The fiber optic port type of the above products is default to single mode dual fiber SC interface/SFP slot, and ST/FC interface is also available. For more configurations, please contact the sales department.