

Control Capabilities?

The Toshiba Lonworks Interface is capable of the following control and monitoring functions for the connected Toshiba Air Conditioner systems.

Function	Setting	Monitor
On/Off	YES	YES
Mode	Auto, Heat, Fan, cool	YES
Set point	18 – 29°C	YES
Fan speed	Stop, auto, Ultra-low, Low, Medium, High	YES
Louver	Swing, Fixed – F1, F2, F3, F4, F5	YES
Filter display	Reset	YES
Fault code	Reset	Hexadecimal fault code
Permit/prohibit local control	On/Off, Mode, Temp. setting, Louver setting, Fan speed setting	YES

How many units can be connected?

Each Toshiba Lonworks Interface can be connected to up to 64 Indoor Units on the TCC-Link Central Control Network. Up to 16 Refrigerant systems can be connected to each Lonworks device on a single TCC-Link Network. Up to 10 TCB-IFLN640TLE Interfaces can be connected to a single TCC-Link Network. The use of multiple TCB-IFLN640TLE devices per TCC-Link Network allows for increased flexibility of installation.

Which Indoor Units can be connected?

• Residential Systems

Residential systems cannot be connected to the Lonworks Interface.

• Light Commercial Systems

All R410A Light Commercial systems, excluding the RAVSM*** XT-E Flexi and the RAV-SM***OKRT-E "O" series High wall models, can be connected to the Lonworks Interface.

This connection requires the use of 1 TCB-PCNT30TLE Network adaptor per Indoor Unit/Group.

• VRF

All VRF systems can be connected to the Lonworks Interface.

Specification

Power Supply	220 – 240 VAC, 50/60 Hz
Power Consumption	3 W
Max. Indoor Units/Groups	64
Operating Temp/Humidity	0° - 40°C, 10 to 90% RH (No Condensation)
Storage Temp.	-20°C to +60°C
Dimensions	66 (H) x 246 (W) x 193 (D) mm
Mass	1.2 kg

Additional Lonworks Products from Toshiba

RBC-EM1-PE	Lonworks Power Meter
RBC-WP1-PE	Interactive Intelligence - Lonworks software Control Program for building management

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Toshiba EMEA Pre Sales & Controls Department

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Lonworks Relay Interface
Building Management Control System



TCB-IFLN640TLE

Lonworks Relay Interface Building Management Control System



What is a Building Management System?

A Building Management System (BMS) is a computer based control system that is installed in buildings to control and monitor mechanical and electrical equipment such as Ventilation, lighting, power systems, fire systems and security systems for that building.

The Core function of most BMS system is to manage the environment within the building and can be used to control heating and cooling equipment and manage the systems that distributes this treated air throughout the building (for example operation of fans or opening/closing dampers).

Another function that is becoming popular with BMS systems is the ability to manage the energy consumption of any electrical equipment in a building. This function is becoming more important in many regions throughout the world due to the increase in legislation regarding building energy consumption levels and the environment.

Accurate management of plant equipment energy consumption can reduce the total energy consumption of the building and reduce cost.

What is Lonworks?

Lonworks is a control system platform built on the LonTalk Communications Protocol created by the Echelon Corporation, and is used for the networking of equipment over media such as Twisted Pair, Power lines, fibre optics and Radio Frequency.

The Lonworks platform has been adopted as the basis for product and service offers in many different industries including Building industry where it is widely used for control of Lighting and HVAC systems.

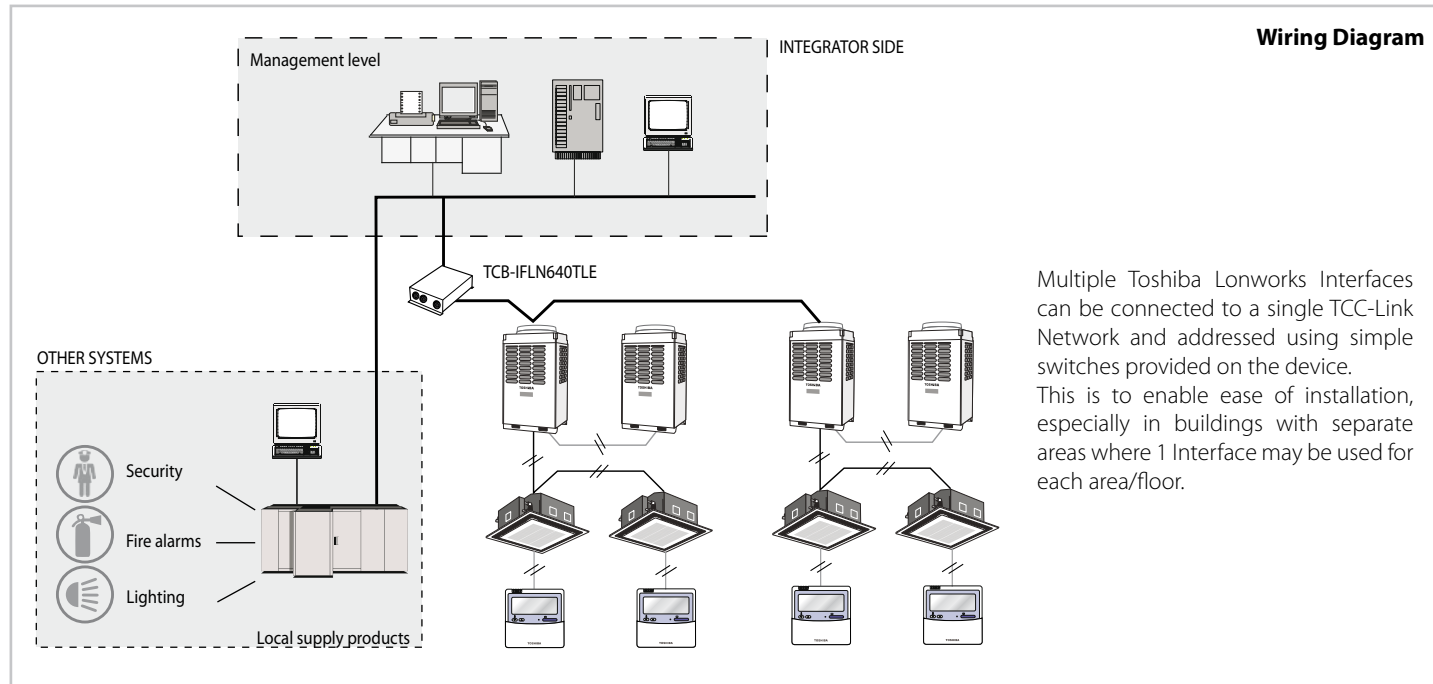
The Toshiba Lonworks System

The Toshiba Lonworks interface 100 % LonMark Compliant and is designed to connect the Toshiba Air Conditioning system to a Lonworks Building Management Control System.

This Interface connects directly to the Toshiba TCC-Link Central Control Network on the Air Conditioner and can be wired on the Indoor or outdoor side depending on preference which allows increased flexibility and ease of installation.

The Interface is then connected to the Lonworks Building Management Control system where it provides 28 Network variables for the sending of Control Commands and receiving unit information.

In addition to these 28 network variables, the Toshiba Lonworks gateway also provides 2 network variables for setting of minimum and maximum transmission intervals.



Multiple Toshiba Lonworks Interfaces can be connected to a single TCC-Link Network and addressed using simple switches provided on the device. This is to enable ease of installation, especially in buildings with separate areas where 1 Interface may be used for each area/floor.