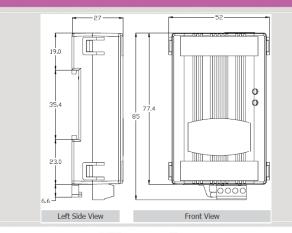


# **M2M Series Products**

# **Universal IR Learning Remote Module**



IR-712-MTCP



**Dimensions** 

IR-712-MTCP is a universal IR learning remote module which can learn IR remote commands of diverse electronic devices. The learning commands can be stored in the module or saved to a file. IR-712-MTCP supplies 2 IR output channels for remote control on multiple devices. The accompanied Ethernet interface with Modbus/TCP protocol provides flexible expansion and control on the modules. Besides, the IR utility provides users with easy configuration, learning, test and storage of IR commands. As a replacement of IR remote controls and a module that can be easily integrated with Modbus client devices (e.g. PAC, PLC, PC... etc.), IR-712-MTCP is well-suited for smart home and building automation.

#### Features

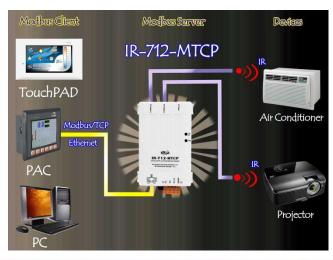
- 2 IR output channels.
- 1 IR learning input.
- Quantity of IR command storage: 512
- Supports learning IR carrier frequencies: 32.768 \( 36 \cdot 37.037 \cdot 38 \cdot 40 \) and 56 kHz.
- Supports Modbus/TCP protocol (server)
- Provides transmitting / learning and power LEDs.
- Built-in Watchdog.
- RoHS Compliance.

### Utility Features

- IR commands learning and testing.
- Save IR learning commands to files.
- Get/Set IR learning commands
- Reference to Modbus commands.
- Set / Reset basic settings of IR-712-MTCP.



## Application







# Hardware Specifications

IR Interface				
IR Output Channels	2 channels with 3.5 mm audio jack			
IR Learning Input	1 channel. Supports 6 IR carrier frequencies: 32.768, 36, 37.037, 38, 40, 56 kHz.			
Ethernet Communication Interface				
Ethernet	10/100 Base-TX, 8-Pin RJ-45 x1 (Auto-negotiating, Auto-MDI/MDIX, LED indicator)			
Protocol	Modbus/TCP (server)			
LED Indicator				
LED	2 LEDs: TR/LN (IR Transmitting/Learning) and PWR (Power)			
Power				
Connector	4-pin (F.G., N/A, +Vs, and GND) screw terminal connecter			
Power Supply	+10 ~ +30 V <sub>DC</sub>			
Power Consumption	Stand by: 1.7 W	1 IR output used: 3.4 W	2 IR outputs used: 5.8 W (Max.)	
Mechanism				
Installation	DIN-Rail Mounting			
Dimensions	52 mm x 85 mm x 27 mm (W x H x L)			
Dip Switch	OP (Normal operation) and FW / Init (Firmware update / Default Communication)			
Environment				
Operating Temp.	-25 ~ +75°C			
Storage Temp.	-30 ~ +80℃			
Humidity	10 ~ 90% RH, non-condensing			

# Ordering Information

IR-712-MTCP CR	Universal IR Learning Remote Module (MBTCP, 2 IR outputs, 512 IR Cmds) with 2 CA-IR-SH2251 (RoHS)
IR-712-MTCP-5 CR	Universal IR Learning Remote Module (MBTCP, 2 IR outputs, 512 IR Cmd) with 2 CA-IR-SH2251-5 (RoHS)

## Accessories

CA-IR-SH2251	Single-headed IR emitter (with adhesive pad, Ø 3 mm IRED, 2.5 m)
CA-IR-SH2252	Dual-headed IR emitter (with adhesive pad, $\emptyset$ 3 mm IRED, 2.5 m)
CA-IR-SH2251-5	Single-headed IR emitter (with adhesive pad, Ø 5 mm IRED, 2.5 m)
CA-IR-SH2252-5	Dual-headed IR emitter (with adhesive pad, Ø 5 mm IRED, 2.5 m)
CA-IR-SH2251-360	Semi-sphere-headed IR blaster cable (with adhesive pad, 2.5 m)