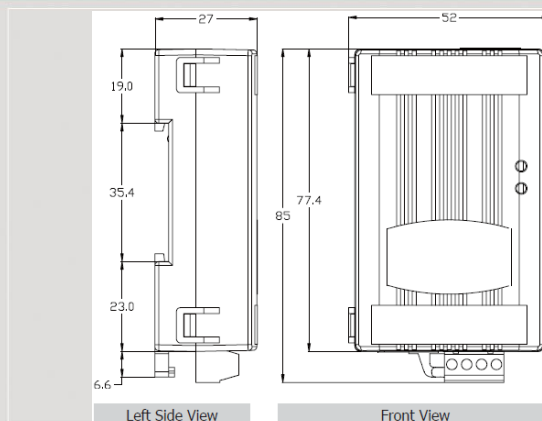


M2M Series Products

Universal IR Learning Module (2 x IR outputs, 512 x IR cmds)



IR-712-MTCP

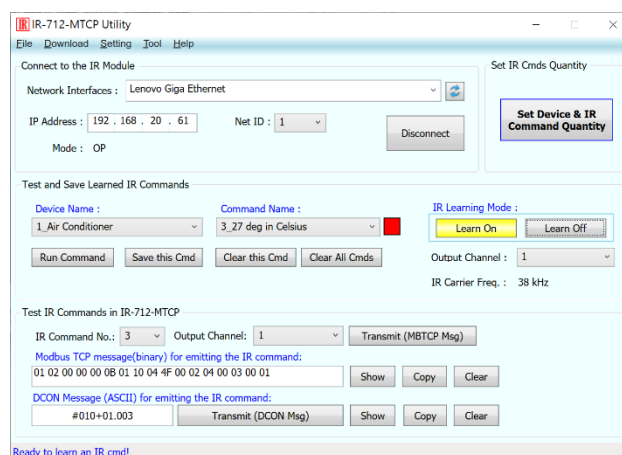


Dimensions

IR-712-MTCP is a universal IR learning remote module which can learn IR remote commands of diverse electronic devices. IR-712-MTCP supplies 2 IR output channels for remote control on multiple devices. The accompanied Ethernet interface with Modbus TCP/UDP and DCON protocols 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

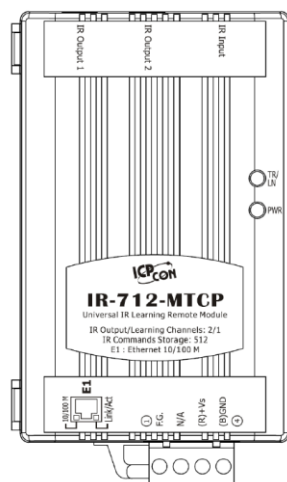
- 2 IR output channels
- 1 IR learning input
- Supports 6 IR carrier frequencies: 33, 36, 37, 38, 40 and 56 kHz
- IR command capacity: 512
- Supports Ethernet interface
- Supports Modbus TCP/UDP protocol to emit IR cmds
- Provides ASCII String Command (DCON protocol) to emit IR cmds
- Built-in Watchdog



Pin Assignments

Utility

- IR quantity configuration.
- IR commands learning and testing.
- Save IR learning commands to files.
- Get/Set IR learning commands.
- Modbus/DCON commands reference.
- Set / Reset basic settings of IR-712-MTCP.
- Shows the waveform of the IR commands



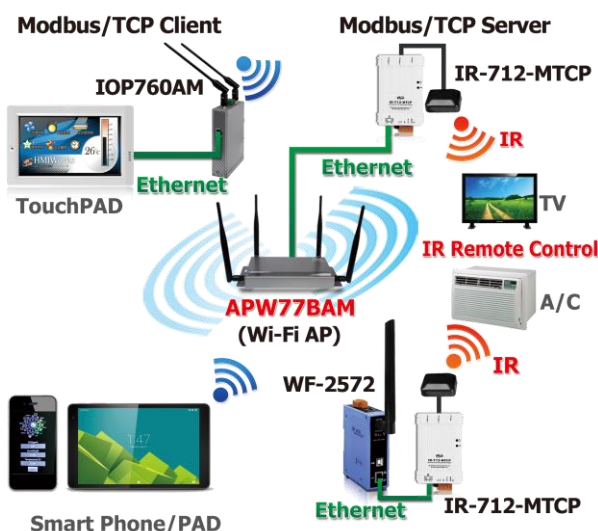
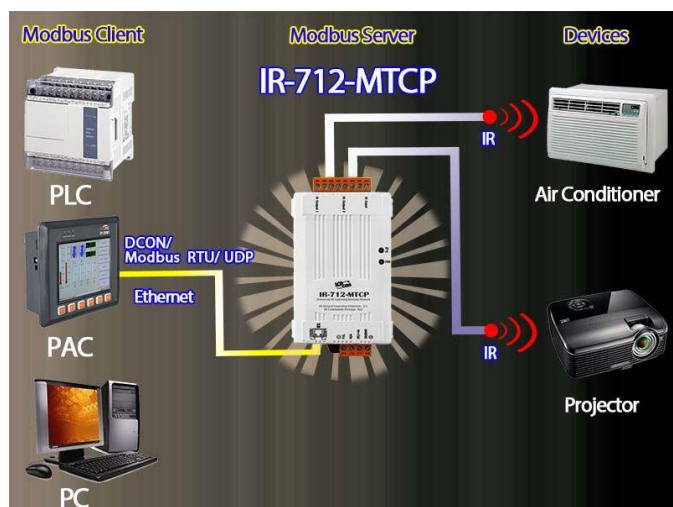
IR Interface of the IR-712-MTCP	
IR Input	IR Input
IR Output (3.5 mm audio jack)	IR Output 1
	IR Output 2

Interface	Pin
Ethernet	E1
Power	GND
	+Vs
Frame Ground	E.G.

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: 33, 36, 37, 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/UDP, DCON (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 connector		
Power Supply	+10 ~ +30 V _{DC}		
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 27 mm x 85 mm (W x L x H)		
Dip Switch	OP (Normal operation) and FW / Init (Firmware update / Default Communication)		
Environment			
Operating Temp.	-25 ~ +75℃		
Storage Temp.	-30 ~ +80℃		
Humidity	10 ~ 90% RH, non-condensing		

Application



Ordering Information

IR-712-MTCP CR	Universal IR Learning Module (2x IR outputs, 512x IR cmds) (Ethernet) with 2x CA-IR-SH2251 emitter cables (RoHS)
IR-712-MTCP-5 CR	Universal IR Learning Module (2x IR outputs, 512x IR cmds) (Ethernet) with 2x CA-IR-SH2251-5 emitter cables (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, Ø 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)