Remote maintenance Wi-Fi Device Terminal Unit

**M2M-711D**

The M2M-711D module is specially designed for the remote maintenance and upgrading the serial to network application solution. Users can choose Ethernet mode or Wi-Fi mode to do the pair connection. And the pair connection provides TCP data tunneling between 2 serial devices.

In addition to M2M-710D original features, M2M-711D has the Ad Hoc mode of operation. This operation mode can be used to extend the distance of RS232/485 network without Wi-Fi AP and Ethernet Hub.

### Features

- Provide pair connection (RS-232, RS-485) on network
- Web-based administration
- Support Virtual COM technology (It’s not supported in Wi-Fi/Ad Hoc mode)
- Accommodatingly with M2M-420-A, M2M-720-A, M2M-710D
- Built-in MiniOS7 OS to keep off the computer virus
- Ethernet Protocol: TCP, UDP, IP, ICMP, ARP, RARP
- Supply static IP/DHCP (Ad Hoc mode don’t support DHCP)
- Provide dynamic DNS function
- Supports IEEE 802.11 b/g for Wi-Fi mode
- Supports WEP-64, WEP-128, WPA-TKIP and WPA2-AES encryption for Wi-Fi mode
- Supports WEP-64, WEP-128 encryption for Ad Hoc mode
- Supports 1~13 RF Channel
- Supports auto control RF channel in Wi-Fi mode
- Auto control channel in Wi-Fi mode
- Ad Hoc mode transmission range up to 100 m (Line of sight)
- Built-in web server
- Quick start
- 5-Digit 7 Segment LED Display
- EMI, RoHS compliance

### Pin Assignments

<table>
<thead>
<tr>
<th>Pin</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CTS1</td>
<td>Clear to Send</td>
</tr>
<tr>
<td>2</td>
<td>RTS1</td>
<td>Request to Send</td>
</tr>
<tr>
<td>3</td>
<td>RXD1</td>
<td>Receive Data</td>
</tr>
<tr>
<td>4</td>
<td>TXD1</td>
<td>Transmit Data</td>
</tr>
<tr>
<td>5</td>
<td>INIT</td>
<td>Init Pin</td>
</tr>
<tr>
<td>6</td>
<td>DATA+</td>
<td>Data+ of RS-485</td>
</tr>
<tr>
<td>7</td>
<td>DATA-</td>
<td>Data- of RS-485</td>
</tr>
<tr>
<td>8</td>
<td>Vcc</td>
<td>Vcc of Power Supply</td>
</tr>
<tr>
<td>9</td>
<td>GND</td>
<td>GND of Power Supply</td>
</tr>
</tbody>
</table>

### Web-based administration

![Web-based administration](http://www.icpdas.com)
## Hardware Specifications

### System
- **CPU**: 80186-80 MHz or compatible
- **SRAM**: 512K
- **Flash**: Flash ROM: 512 KB ; Erase unit is one sector (64 KB) ; 100,000 erase/write cycles
- **EEPROM**: 16 KB, retention > 40 years. 1,000,000 erase/write cycles

### Communication Interface
- **COM ports**: COM1:5-wire RS-232(RxD, TxD, RTS, CTS, GND); COM2: RS-485(DATA+, DATA-)
- **Baud Rate**: 1200/2400/4800/9600/19200/38400/57600/115200 bps
- **Data Format**: 7/8 data bits, None/Odd/Even parity bit, 1/2 stop bit
- **Ethernet**: 10/100 Base-TX Ethernet controller

### Wireless Network Interface (IEEE 802.11b/g)
- **RF channels**: 1~13; 1: Supports auto control channel in Wi-Fi mode
- **Receive sensitivity**: -87 dBm(IEEE 802.11b) / -72 dBm (IEEE 802.11g)
- **Data encryption**: WPA-TKIP / WPA2-AES / WEP-64 /WEP-128
  (It’s not supported WPA-TKIP,WPA-AES encryption in Ad Hoc mode)
- **Transmit Power**: 12 dBm(IEEE 802.11b) / 14 dBm(IEEE 802.11g)
- **Antenna**: 2.4GHz - 2dBm Omni-Directional antenna
- **Transmission range**: 100M(LOS)

### Power
- **Protection**: Power reverse polarity protection
- **Power supply**: Unregulated +10 V<sub>DC</sub> ~ +30 V<sub>DC</sub>
- **Power Consumption**: 3.6W

### LED Indicators
- **5-Digit 7 Segment**: Yes
- **System**: Red
- **Wireless Network**: Yellow

### Mechanical
- **Dimensions**: 72 mm x 33 mm x 123 mm (W x L x H)
- **Installation**: DIN-Rail or Wall Mounting

### Environment
- **Operating Temperature**: -25 ~ +75 °C
- **Storage Temperature**: -30 ~ +80 °C

## Applications

![Diagram of applications](image)

## Ordering Information

<table>
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