

## **1.0 DETAILS OF REQUIREMENTS**

**The quantity required is 2000**

### **GENERAL**

This section outlines the minimum performance and design specifications of an ADSL modem that is embedded with router functionality that should be used in any standard ADSL defined network.

The ADSL modem should be compatible to any standard DSLAM equipment that networks the ADSL facility. The modem should be able to provide customers with consistent features, connectivity and ease of operation. All the high end and low end modems must conform to these specifications.

The modem should compile with the following technical specifications:

### **Technical specification**

<b>HARDWARE FEATURES</b>	
<b>Interface</b>	4 10/100Mbps RJ45 Ports 1 RJ11 Port
<b>Button</b>	1 Power On/Off Switch 1 WPS Button 1 Wi-Fi On/Off Button
<b>External Power Supply</b>	9VDC or 12VDC
<b>IEEE Standards</b>	IEEE 802.3, 802.3u
<b>ADSL Standards</b>	Full-rate ANSI T1.413 Issue 2, ITU-T G.992.1(G.DMT), ITU-T G.992.2(G.Lite) ITU-T G.994.1 (G.hs), ITU-T G.995.1 , ITU-T G.996.1, ITU-T G.997.1, ITU-T K.2.1
<b>ADSL2 Standards</b>	ITU-T G.992.3 (G.dmt.bis), ITU-T G.992.4 (G.lite.bis)
<b>ADSL2+ Standards</b>	ITU-T G.992.5
<b>Antenna Type</b>	Omni directional, Detachable, Reverse SMA
<b>Antenna Gain</b>	1 * 5dBi
<b>WIRELESS FEATURES</b>	
<b>Wireless Speed</b>	150Mbps or More
<b>Wireless Standards</b>	IEEE 802.11g, 802.11b, with some n features
<b>Frequency</b>	2.400-2.4835GHz or Both 2.4 & 5GHz
<b>Transmit Power</b>	<20dBm(EIRP)
<b>Wireless Security</b>	Support 64/128 bit WEP, WPA-PSK/WPA2-PSK, Wireless MAC Filtering
<b>SOFTWARE FEATURES</b>	
<b>Quality of Service</b>	QoS Remarking based on IPP/ToS, DSCP and 802.1p
<b>Port Forwarding</b>	Virtual server, DMZ, ACL(Access Control List)
<b>VPN Pass-Through</b>	PPTP, L2TP, IPSec Pass-through
<b>ATM/PPP Protocols</b>	ATM Forum UNI3.1/4.0, PPP over ATM (RFC 2364),

<b>SOFTWARE FEATURES</b>	
	PPP over Ethernet (RFC2516), IPoA (RFC1577/2225), PVC - Up to 8 PVCs,
<b>Advanced Features</b>	Traffic Shaping(ATM QoS) UBR, CBR, VBR-rt, VBR-nrt; Dynamic Host Configuration Protocol (DHCP), DHCP relay; Network Address Translation (NAT); PVC/Ethernet Port Mapping VLAN, 802.1P, Static Routing, RIP v1/v2 (optional); DNS Relay, DDNS, IGMP snooping V1/2IGMP Multicast, UPnP
<b>Security</b>	NAT Firewall, SPI Firewall, MAC / IP / Packet / Application / URL Filtering, Denial of Service(DoS), SYN Flooding, Ping of Death
<b>Management</b>	Web Based Configuration(HTTP), Remote management, Telnet management, Command Line Interface, Web Based Firmware Upgrade, Diagnostic Tools

<b>OTHERS</b>	
<b>Package Contents</b>	<ol style="list-style-type: none"> <li>1. ADSL Modem</li> <li>2. External Splitter</li> <li>3. RJ-11 Telephone Cables x 2</li> <li>4. RJ-45 Ethernet Cables</li> <li>5. Quick Installation Guide</li> <li>6. Resource CD</li> <li>7. Power Adapter</li> </ol>
<b>System Requirements</b>	Microsoft® Windows® 98SE, NT, 2000, XP, Vista™, Windows 7 or Windows 8, MAC® OS, NetWare®, UNIX® or Linux.
<b>Environment</b>	Operating Temperature: 0°C~40°C (32°F~104°F) Storage Temperature: -40°C~70°C (-40°F~158°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing

**Items offered must comply with all attributes specified in ADSL Modems per item.**

**\*NB: No other option will be accepted.**

**Tel•One Reserves The Right To Alter Quantities**