|  |  |  |
| --- | --- | --- |
| **Router Specifications** | **Data** | **Notes** |
| Internet Service Provider (ISP) |  |  |
| Device Name |  |  |
| DOCSIS Technology |  |  |
| Latest Firmware Version: |  |  |
| Known CVE’s |  |  |
| Wi-Fi Coverage |  |  |
| Maximum Throughput |  |  |
| Wi-Fi Standard |  |  |
| Antenna Configuration |  |  |
| Processor & Ram |  |  |
| Supported WiFi Encryption |  |  |
| Supported TLS |  |  |
| Firewall |  |  |
| Cable |  |  |
| Speed |  |  |
| Price |  |  |
| Lease or Purchase? |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Security (50%)** | | | | | |
| Reference ID | Security Criteria | Measurement Criteria | Scoring Scale (0-10 or Yes/No) | Result | Notes |
| CL.OOB-006 | Default Credentials | Are default credentials required to be changed upon initial setup? | - 10 = Requires unique password on first use  - 5 = Uses default password but prompts for change  - 0 = Uses default credentials |  |  |
| CL.SBOM-010 | Firmware Update Frequency | Number of security updates per year | - 10 = ≥4 security updates per year  - 5 = 1–3 updates per year  - 0 = No update history or no known updates |  |  |
| NVD.NIST.GOV | Known Vulnerabilities (CVE Count) | Publicly disclosed vulnerabilities in past 2 years | - 10 = 0 known critical CVEs in past 2 years  - 5 = 1–2 CVEs with patches  - 0 = 3+ unresolved or actively exploited CVEs |  |  |
| CL.NETA-002  IMDA.4.5.2.4.1 | Encryption Support | WPA3 Support | - 10 = WPA3 supported and enabled by default  - 5 = WPA3 optional or partially implemented  - 0 = No WPA3 support |  |  |
| CL.OOB-008  CL.NETS-005 | Remote Access | Are the following remote features disabled by default (Telnet, SSH, UPnP, FTP)? | - 10 = All remote management off by default  - 5 = Enabled but behind authentication  - 0 = Exposed without security |  |  |
| CL.NETS-001 | Admin Interface | Does the router enforce HTTPS for admin access? | - 10 = HTTPS only  - 5 = HTTP default, HTTPS optional  - 0 = HTTP only |  |  |
| IMDA.4.3.15.1 | Firewall | Is the firewall enabled by default? | - 10 = Stateful firewall enabled by default  - 5 = Configurable but off by default  - 0 = No firewall or exposed ports |  |  |
|  | Network Isolation | Can the guest network be isolated from the main network? | - 10 = Fully isolated guest network  - 5 = Partial separation  - 0 = No isolation possible |  |  |
| IMDA.4.3.g  IMDA.4.3.a | Automatic Security Updates | Does the router support automatic security updates? | - 10 = Enabled by default  - 5 = Manual updates required  - 0 = No update mechanism |  |  |
| **Total Security Score** |  | | | | |
| **Usability (17%)** | | | | | |
| IMDA.GEN.OPS.10 | Setup Time | Is the device self-installable by an end user in under 20 minutes assuming the default configuration and mode of operation? | - 10 = ≤20 minutes with app or guide  - 5 = 25–30 minutes  - 0 = >30 minutes or unclear steps |  |  |
| IMDA.GEN.OPS.4 | Lifespan | Is the life expectancy of the router at least 7 years? | - 10 = >5 years support & updates  - 5 = 2–4 years support & updates  - 0 = <2 years or discontinued |  |  |
| IMDA. GEN.OPS.11 | Drivers | Are additional drivers other than networking drivers required for full and proper use of the device? | (Yes = 0, No = 10) |  |  |
| IMDA. GEN.OPS.19 | Website Support | Is there a web site where firmware updates and documentation are available? | - 10 = Full guides, manuals, and FAQ available  - 5 = Limited content or out of date  - 0 = No official support docs |  |  |
| **Total Usability Score** |  | | | | |
| **Performance (25%)** | | | | | |
| PERF.1 | Wi-Fi Speed | Maximum download & upload speeds | - 10 = Matches or exceeds ISP plan reliably  - 5 = 60–80% of plan speeds  - 0 = < 60% of plan speed |  | ISP claims 1 Gbps speed, but reviews show 700 Mbps actual - Score: 7/10 |
| PERF.2 | Signal Strength | Check user-reported Wi-Fi range & RSSI at distances | - 10 = <= -30 dbm  - 5 = > -30 dbm and < -80 dbm  - 0 = > -80 dbm |  | Forum users report weak Wi-Fi beyond 20ft - Score: 5/10 |
| PERF.3 | Latency & Jitter | What are the ping times in ms? | - 10 = 10ms  - 5 = 10–100ms  - 0 = >100ms |  |  |
| PERF.4 | Multi-Device Handling | Can it handle multiple devices without slowdown? | - 10 = 10 or more devices with no slowdown  - 5 = Moderate slowdown with 10 or more devices  - 0 = Chokes with 5 or more devices |  | Tech reviews show low latency & strong multi-device performance - Score: 9/10 |
| **Total Performance Score:** |  | | | | |
| **Cost & Value (8%)** | | | | | |
|  | Router Rental Fee | What is the monthly cost vs. purchase option? | - 10 = No cost or <$5/month  - 5 = $6–10/month  - 0 = >$10/month |  |  |
|  | Buyout Option | Can users purchase the router outright? | - 10 = Full ownership or third-party router allowed  - 5 = Only ISP approved models  - 0 = Locked to ISP rental only |  |  |
|  | Hidden Fees | Are there additional costs? (e.g. services fees) | - 10 = No surprise costs  - 5 = Some service/activation fees  - 0 = Frequent hidden charges |  |  |
| Total Cost Score |  | | | | |

|  |  |
| --- | --- |
| **Final Score:** | Total Score=(Security Score×0.40)+(Usability Score×0.20)+(Performance Score×0.30)+(Cost Score×0.10) |
| **Additional Notes** |  |

References:

|  |  |
| --- | --- |
| CL | CableLabs Gateway Device Security Best Common Practices |
| IMDA | IMDA Security Requirements for Residential Gateways |
| NVD.NIST.GOV | Nvd.nist.gov – CVE database |
|  | <https://www.smallnetbuilder.com/> |
|  |  |