# Table 7: RSA Benchmarks – Key Lengths and Performance

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| --- | --- | --- | --- | --- | --- | --- |
| Key Size (bits) | Equivalent Symmetric Key Strength | Signature Generation Time (ms) | Signature Verification Time (ms) | Encryption Time (ms) | Decryption Time (ms) | Notes |
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|  |  |  |  |  |  |  |
| 1024 | 80 bits | 2 | 0.05 | 0.8 | 15 | Now considered weak; not recommended for new systems |
| 2048 | 112 bits | 15 | 0.2 | 3 | 60 | Common standard; widely used |
| 3072 | 128 bits | 50 | 0.5 | 10 | 150 | Enhanced security over 2048-bit |
| 4096 | ~130 bits | 90 | 0.8 | 18 | 300 | Often used for higher security needs |