| **Feature** | **Classic Load Balancer (CLB)** | **Application Load Balancer (ALB)** | **Network Load Balancer (NLB)** | **Gateway Load Balancer (GLB)** |
| --- | --- | --- | --- | --- |
| **Layer** | Layer 4 (Transport) & Layer 7 (Application) | Layer 7 (Application) | Layer 4 (Transport) | Layer 3 (Network) |
| **Protocols Supported** | HTTP, HTTPS, TCP, SSL | HTTP, HTTPS, WebSocket | TCP, TLS, UDP | IP Protocol |
| **Ideal Use Case** | Basic load balancing, legacy applications | Advanced request routing, microservices, APIs | High-performance, low-latency applications | Third-party virtual appliances (e.g., firewalls) |
| **Target Types** | EC2 Instances | EC2 Instances, Containers, IP addresses, Lambda | EC2 Instances, IP addresses | Virtual appliances |
| **Request Routing** | Basic round-robin and session stickiness | Path-based and host-based routing | Directs connections based on IP | Directs traffic to virtual appliances |
| **Health Checks** | Basic TCP or HTTP checks | HTTP, HTTPS, and gRPC | TCP and HTTP health checks | N/A (depends on appliance setup) |
| **SSL Termination** | Yes | Yes | No | No |
| **Sticky Sessions (Session Affinity)** | Yes | Yes | No | N/A |
| **Cross-Zone Load Balancing** | Optional | Always enabled | Optional | N/A |
| **Scaling** | Limited | Scales based on application traffic | Can handle millions of requests per second | Scales virtual appliances automatically |
| **IPv6 Support** | Yes | Yes | Yes | Yes |
| **WebSocket Support** | No | Yes | No | No |
| **Logging & Monitoring** | Basic CloudWatch metrics | Enhanced logging and CloudWatch metrics | CloudWatch metrics with low latency | Flow logs for traffic monitoring |
| **Pricing Model** | Per-hour and per-GB data processing | Per-hour and per-GB data processing | Per-hour and per-LCU (Load Balancer Capacity Unit) | Per-hour and per-GB data processing |
| **Best For** | Simpler and legacy applications | Modern microservices, APIs, and web applications | Performance-sensitive applications | Network appliance deployments (e.g., firewalls) |