OSI layer

- Application layer- HTTP | MQTT | CoAP | AMQP
- Presentation layer-
- Session layer-
- Transport layer-TCP | UDP
- Network layer-IP | 6LowPAN[IPv6 over Low-power Wireless Personal Area N/w]
- Data link layer- IEE 802.15.4
- Physical layer- BLE | Zigbee | Z-Wave | WiFi

Request response model

data as Socket

IoT platform[cloud] contains resources and APIs.

Data is sent when client requests for it.

HTTP is used

disadv - Data will not be updated till client requests for data.

Publish Subsriber Model

data as publish

Communication needs to be maintained.

Publisher[sensor] sends data to cloud and subscriber[client] receives data. Subscriber listens continuously.

Many subscribers

AMXP and MQTT are used in Pub-Sub.

Peer to peer communication

The connection is direct communication infrastructure between two peers/devices.

BLE, AMQP and WebRTC are used.

Data exchange formats

Most IoT devices are used for telemetry.

Telemetry - Remotely sending metrics.

Renowned formats

- eXtensible Markup Language[XML]
- Javascript Object Notation[JSON]

Lesser known

- Concise Binary Object Representation[CBOR]

JSON : RFC 8259

XML : RFC 5364
