

port

FTP	-	20, 21		FTPS - 990
SSH	-	22		
SFTP	-	22		
SCP	-	22		
SMTP	-	25		
SNMP	-	161		
LDAP	-	389		LDAPS 636
microsoft SQL	-	1433		
LDP	-	3389		
HTTP	-	80		
HTTPS	-	443		
SIP	-	5060		5061
SMB	-	139		445
RADIUS	-	1812		
SQLnet	-	1521		
SYSLOG	-	514		
POP3	-	110	v use by mail client to retrieve email from server	
POP3 over SSL	-	995		
IMAP	-	143	get data from mail server over TCP / IP	
IMAP over SSL	-	993		
TFTP	-	69		
VRRP	-	112		
SMB	-	139, 445		
SCP	-	422		

IEEE

802.1X - Network authentication

802.1d - STP

802.1ad - LACP (link aggregation)

802.3af POE

802.3at - POE+

802.11 - IEEE 802.11 wireless

802.11b - 902

802.11g - 902

802.11n - 2902

1107 | 0367 - 972

802.11ac - 802

802.11ax - 802

802.11p - 802

802.11v - 802

802.11w - 802

802.11x - 802

802.11y - 802

802.11z - 802

signal noise

DOCSIS → coaxial cable for internet
DSL → telephone line for internet

wifi security

WEP - - 40 bit encryption key
WPA - TKIP
WPA2 - AES

WPA - TKIP (dynamically change its
key)

WPS → wifi protected setup

signal / noise - 55 dbm | - 99 dbm

Transmit rate 648

codec - encoded and decoded
codec is a software (or can be hardware)
that compresses your video data before
it is transmitted over a network.

56K modem → Dial up modem

T1 connection provides a guaranteed 1.544 mbps of throughput.

SCADA/ ICS → supervisory control and Data Acquisition / industrial control system are used in manufacturing and assembly line networks.

SCADA systems are used by industrial organizations and companies in the public and private sectors to control and maintain efficiency of storing data for smart decisions and communicate system issues to help mitigate downtime.

NFV - Network function virtualization is a way to reduce cost and accelerate service deployment for network operators by decoupling functions like a firewall or encryption from dedicated hardware and moving them virtual servers.

CSU/DSU → Channel Service Unit / data service unit is a hardware device about the size of an external modem that converts digital data frames from communication technology used on T1 into frame appropriate for WAN.

568A | 568B mismatch can cause no connectivity.

split pair → A split pair occurs when one wire from each of the two different pairs get swapped identically both ends of the cable. commonly used in older cat3 cable.

NAS - Network Attached storage
→ Is a self contained computer that connects to home or business network and can share files over TCP/IP. A NAS consists of a hard disk for storage of files and usually a RAID system and for performance.

Fibre Channel - It is a high speed data transfer protocol that provides in-order lossless delivery of your block data. It is designed to connect general-purpose computers, mainframes, and supercomputers to storage devices.

WAP - wireless access point

bandwidth saturation

→ is a phenomenon that occurs when all of a circuit's available bandwidth in a given direction is being utilized by a single upload or download which can result in high latency and performance issue.

VLAN hopping → is an attack where the

attacker is able to send traffic from one VLAN into another either by double logging the traffic or conveying spoofing.

Bluetooth - peer to peer - up to 10m

RFID - automatically identify and track tags attached to objects

NFC - up to 4cm

WiFi - up to 150m