

Internet Protocol (IP) header

Explained with Diagrams - <https://www.thegeekstuff.com/2012/03/ip-protocol-header/>

bits 0-7	bits 8-15	bits 16-23	bits 24-31
Version (4 bits)	IP Header Length (4 bits)	Type of Service (8 bits)	Total Length (in number of bytes) (16 bits)
IP Identification Number (16 bits)		Flags (3 bits)	Fragment Offset (13 bits)
Time to Live (8 bits)	Protocol Number (8 bits)	Header Checksum (16 bits)	
Source IP Address (32 bits)			
Destination IP Address (32 bits)			
Options (if any) + Padding (matching to 32-bit boundary)			
(data . . .)			

Internet Control Message Protocol (ICMP) header

bits 0-7	bits 8-15	bits 16-23	bits 24 - 31
Type (8 bits)	Code (8 bits)	Checksum (16 bits)	
(data . . .)			

Transmission Control Protocol (TCP) header

bits 0-7	bits 8-15							bits 16-23	bits 24-31
Source Port Number (16 bits)								Destination Port Number (16 bits)	
Sequence Number (32 bits)									
Acknowledgment Number (32 bits)									
TCP Header Length (4 bits)	Reserved (6 bits)	URG	ACK	PSH	RST	SYN	FIN	Window Size (16 bits)	
Checksum (16 bits)								Urgent Pointer (16 bits)	
Options (if any) + Padding (matching to 32-bit boundary)									
(data . . .)									

User Datagram Protocol (UDP) header

bits 0-7	bits 8-15	bits 16-23	bits 24-31
Source Port Number (16 bits)		Destination Port Number (16 bits)	
User Datagram Length (16 bits)		Checksum (16 bits)	
(data . . .)			