IP Header: 20 octets fixed

destination host
(IP address)

source host
(IP address)

protocol
(6 = TCP)

TCPDUMP displays
offset from initial
sequence number

IP version 4
(it's not IPv6)

packet length = 60

checksum

02:53:07.095425 IP (tos 0x0, ttl 46, id 30756, offset 0, flags [DF], proto 6, length: 60) client 39253 > server ftp: P [tcp sum ok] 25:33(8) ack 78 win 730 <nop,nop, timestamp 3325099444 848947814>
0x0000: 4500 003c 7824 4000 2e06 47df d249 362e E..<x$@...G..I6.
0x0010: d2ee b152 9955 0015 d771 d842 0226 4bf2 ...R.U...q.B.&K.
0x0020: 8018 02da 9d0b 0000 0101 080a c630 fdb4 ....0..
0x0030: 3299 ea66 5459 5045 2049 0d0a   2..fTYPE.I..

TCP header
size in 32bit
words

data begins here
if TCP size=8

data begins here
if TCP size=a

TCP checksum

ack to
sequence #

TCP flags

source
port

window size

20   URG
10   ACK
08 `P' PSH (push)
04 `R' RST (reset)
02 `S' SYN (synchronize)
01 `F' FIN (finalize)

destination
port

sequence # of
this packet

Data: variable size

TCP Header: variable size

data size = (packet length) - 4 x (TCP header size)