723025-10.7.2-5E AID:137206 | 12/24/2018

Formula to calculate packet efficiency:

The smallest possible size of an Ethernet packet to transmit 1 byte of data is 64 bytes.

Data field – 46 bytes (to transmit 1 byte of data the minimum required data filed)

Destination MAC address – 6 bytes

Source MAC address – 6 bytes

Packet type – 2 bytes

CRC – 4bytes

Total – 64 bytes

Size of the data field in bits =

Total packet size in bits =

Packet Efficiency =

=

= 0.71875

Packet Efficiency in percentage =

= 71.875 %

**Note:**

\* 1 byte equals to 8 bits

\* If the length of the packet is smaller, the packet efficiency decreases