

Sequence number: 1 (relative sequence number)
[Next sequence number: 15 (relative sequence number)]
Acknowledgment number: 1 (relative ack number)
1000 = Header Length: 32 bytes (8)
Flags: 0x018 (PSH, ACK)
Window size value: 512
[Calculated window size: 65536]
[Window size scaling factor: 128]
Checksum: 0xfe36 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
[Timestamps]
TCP payload (14 bytes)
[PDU Size: 14]

MQ Telemetry Transport Protocol, Connect Command
Header Flags: 0x10, Message Type: Connect Command
Msg Len: 12
Protocol Name Length: 4
Protocol Name: MQTT
Version: MQTT v3.1.1 (4)
Connect Flags: 0x02, QoS Level: At most once delivery (Fire and Forget), Clean Session Flag
0... = User Name Flag: Not set
.0.. = Password Flag: Not set
..0. = Will Retain: Not set
...0 0... = QoS Level: At most once delivery (Fire and Forget) (0)
.... .0.. = Will Flag: Not set
.... ..1. = Clean Session Flag: Set
.... ...0 = (Reserved): Not set
Keep Alive: 15
Client ID Length: 0
Client ID:

No.	Time	Source	Destination	Protocol	Length	Info
5	0.003299021	127.0.0.1	127.0.0.1	TCP	66	1883 → 57564 [ACK] Seq=1 Ack=15 Win=65536

Len=0 TSval=3669304791 TSecr=3669304791
Frame 5: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 1883, Dst Port: 57564, Seq: 1, Ack: 15, Len: 0
Source Port: 1883
Destination Port: 57564
[Stream index: 0]
[TCP Segment Len: 0]
Sequence number: 1 (relative sequence number)
[Next sequence number: 1 (relative sequence number)]
Acknowledgment number: 15 (relative ack number)
1000 = Header Length: 32 bytes (8)
Flags: 0x010 (ACK)
Window size value: 512
[Calculated window size: 65536]
[Window size scaling factor: 128]
Checksum: 0xfe28 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
[Timestamps]

No.	Time	Source	Destination	Protocol	Length	Info
6	0.005174728	127.0.0.1	127.0.0.1	MQTT	70	Connect Ack

Frame 6: 70 bytes on wire (560 bits), 70 bytes captured (560 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 1883, Dst Port: 57564, Seq: 1, Ack: 15, Len: 4
Source Port: 1883
Destination Port: 57564
[Stream index: 0]
[TCP Segment Len: 4]
Sequence number: 1 (relative sequence number)
[Next sequence number: 5 (relative sequence number)]
Acknowledgment number: 15 (relative ack number)
1000 = Header Length: 32 bytes (8)
Flags: 0x018 (PSH, ACK)
Window size value: 512
[Calculated window size: 65536]
[Window size scaling factor: 128]
Checksum: 0xfe2c [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
[Timestamps]

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    TCP payload (4 bytes)
    [PDU Size: 4]
MQ Telemetry Transport Protocol, Connect Ack
Header Flags: 0x20, Message Type: Connect Ack
Msg Len: 2
Acknowledge Flags: 0x00
Return Code: Connection Accepted (0)
No.      Time      Source      Destination      Protocol Length Info
   7 0.005187530 127.0.0.1    127.0.0.1      TCP          66      57564 → 1883 [ACK] Seq=15 Ack=5 Win=65536
Len=0 TSval=3669304793 TSecr=3669304793
Frame 7: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 57564, Dst Port: 1883, Seq: 15, Ack: 5, Len: 0
    Source Port: 57564
    Destination Port: 1883
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 15      (relative sequence number)
    [Next sequence number: 15      (relative sequence number)]
    Acknowledgment number: 5      (relative ack number)
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x010 (ACK)
    Window size value: 512
    [Calculated window size: 65536]
    [Window size scaling factor: 128]
    Checksum: 0xfe28 [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
No.      Time      Source      Destination      Protocol Length Info
   8 0.005474783 127.0.0.1    127.0.0.1      MQTT         197      Publish Message [resources/
0c350791-4971-46a0-8b00-9034df38a36c/temperature]
Frame 8: 197 bytes on wire (1576 bits), 197 bytes captured (1576 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 57564, Dst Port: 1883, Seq: 15, Ack: 5, Len: 131
    Source Port: 57564
    Destination Port: 1883
    [Stream index: 0]
    [TCP Segment Len: 131]
    Sequence number: 15      (relative sequence number)
    [Next sequence number: 146      (relative sequence number)]
    Acknowledgment number: 5      (relative ack number)
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x018 (PSH, ACK)
    Window size value: 512
    [Calculated window size: 65536]
    [Window size scaling factor: 128]
    Checksum: 0xfeab [unverified]
    [Checksum Status: Unverified]
    Urgent pointer: 0
    Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
    [SEQ/ACK analysis]
    [Timestamps]
    TCP payload (131 bytes)
    [PDU Size: 131]
MQ Telemetry Transport Protocol, Publish Message
Header Flags: 0x30, Message Type: Publish Message, QoS Level: At most once delivery (Fire and Forget)
Msg Len: 128
Topic Length: 58
Topic: resources/0c350791-4971-46a0-8b00-9034df38a36c/temperature
Message: {"data":[{"temperature":10,"timestamp":"2017-06-14T17:52:25.428Z"}]}
No.      Time      Source      Destination      Protocol Length Info
   9 0.005485450 127.0.0.1    127.0.0.1      TCP          66      1883 → 57564 [ACK] Seq=5 Ack=146 Win=65408
Len=0 TSval=3669304794 TSecr=3669304794
Frame 9: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 1883, Dst Port: 57564, Seq: 5, Ack: 146, Len: 0
    Source Port: 1883
    Destination Port: 57564
    [Stream index: 0]
    [TCP Segment Len: 0]
    Sequence number: 5      (relative sequence number)
    [Next sequence number: 5      (relative sequence number)]
    Acknowledgment number: 146      (relative ack number)
    1000 .... = Header Length: 32 bytes (8)
    Flags: 0x010 (ACK)
    Window size value: 511

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[Calculated window size: 65408]
[Window size scaling factor: 128]
Checksum: 0xfe28 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[SEQ/ACK analysis]
[Timestamps]
No.      Time                Source                Destination            Protocol Length Info
   10  0.005546546      127.0.0.1            127.0.0.1              MQTT      68      Disconnect Req
Frame 10: 68 bytes on wire (544 bits), 68 bytes captured (544 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 57564, Dst Port: 1883, Seq: 146, Ack: 5, Len: 2
  Source Port: 57564
  Destination Port: 1883
  [Stream index: 0]
  [TCP Segment Len: 2]
  Sequence number: 146      (relative sequence number)
  [Next sequence number: 148      (relative sequence number)]
  Acknowledgment number: 5      (relative ack number)
  1000 .... = Header Length: 32 bytes (8)
  Flags: 0x018 (PSH, ACK)
  Window size value: 512
  [Calculated window size: 65536]
  [Window size scaling factor: 128]
  Checksum: 0xfe2a [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 0
  Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  [Timestamps]
  TCP payload (2 bytes)
  [PDU Size: 2]
MQ Telemetry Transport Protocol, Disconnect Req
Header Flags: 0xe0, Message Type: Disconnect Req
Msg Len: 0
No.      Time                Source                Destination            Protocol Length Info
   11  0.005552144      127.0.0.1            127.0.0.1              TCP       66      1883 → 57564 [ACK] Seq=5 Ack=148 Win=65408
Len=0 TSval=3669304794 TSecr=3669304794
Frame 11: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 1883, Dst Port: 57564, Seq: 5, Ack: 148, Len: 0
  Source Port: 1883
  Destination Port: 57564
  [Stream index: 0]
  [TCP Segment Len: 0]
  Sequence number: 5      (relative sequence number)
  [Next sequence number: 5      (relative sequence number)]
  Acknowledgment number: 148      (relative ack number)
  1000 .... = Header Length: 32 bytes (8)
  Flags: 0x010 (ACK)
  Window size value: 511
  [Calculated window size: 65408]
  [Window size scaling factor: 128]
  Checksum: 0xfe28 [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 0
  Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  [Timestamps]
No.      Time                Source                Destination            Protocol Length Info
   12  0.005570683      127.0.0.1            127.0.0.1              TCP       66      57564 → 1883 [FIN, ACK] Seq=148 Ack=5
Win=65536 Len=0 TSval=3669304794 TSecr=3669304794
Frame 12: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 57564, Dst Port: 1883, Seq: 148, Ack: 5, Len: 0
  Source Port: 57564
  Destination Port: 1883
  [Stream index: 0]
  [TCP Segment Len: 0]
  Sequence number: 148      (relative sequence number)
  [Next sequence number: 148      (relative sequence number)]
  Acknowledgment number: 5      (relative ack number)
  1000 .... = Header Length: 32 bytes (8)
  Flags: 0x011 (FIN, ACK)
  Window size value: 512
  [Calculated window size: 65536]
  [Window size scaling factor: 128]
  Checksum: 0xfe28 [unverified]
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[Checksum Status: Unverified]
Urgent pointer: 0
Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
[Timestamps]
No.      Time                Source                Destination           Protocol Length Info
   13  0.005715764        127.0.0.1            127.0.0.1             TCP           66      1883 → 57564 [FIN, ACK] Seq=5 Ack=149
Win=65536 Len=0 TSval=3669304794 TSecr=3669304794
Frame 13: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 1883, Dst Port: 57564, Seq: 5, Ack: 149, Len: 0
  Source Port: 1883
  Destination Port: 57564
  [Stream index: 0]
  [TCP Segment Len: 0]
  Sequence number: 5      (relative sequence number)
  [Next sequence number: 5      (relative sequence number)]
  Acknowledgment number: 149      (relative ack number)
  1000 .... = Header Length: 32 bytes (8)
  Flags: 0x011 (FIN, ACK)
  Window size value: 512
  [Calculated window size: 65536]
  [Window size scaling factor: 128]
  Checksum: 0xfe28 [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 0
  Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  [Timestamps]
No.      Time                Source                Destination           Protocol Length Info
   14  0.005723864        127.0.0.1            127.0.0.1             TCP           66      57564 → 1883 [ACK] Seq=149 Ack=6 Win=65536
Len=0 TSval=3669304794 TSecr=3669304794
Frame 14: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface 0
Ethernet II, Src: 00:00:00_00:00:00 (00:00:00:00:00:00), Dst: 00:00:00_00:00:00 (00:00:00:00:00:00)
Internet Protocol Version 4, Src: 127.0.0.1, Dst: 127.0.0.1
Transmission Control Protocol, Src Port: 57564, Dst Port: 1883, Seq: 149, Ack: 6, Len: 0
  Source Port: 57564
  Destination Port: 1883
  [Stream index: 0]
  [TCP Segment Len: 0]
  Sequence number: 149      (relative sequence number)
  [Next sequence number: 149      (relative sequence number)]
  Acknowledgment number: 6      (relative ack number)
  1000 .... = Header Length: 32 bytes (8)
  Flags: 0x010 (ACK)
  Window size value: 512
  [Calculated window size: 65536]
  [Window size scaling factor: 128]
  Checksum: 0xfe28 [unverified]
  [Checksum Status: Unverified]
  Urgent pointer: 0
  Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
  [SEQ/ACK analysis]
  [Timestamps]
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