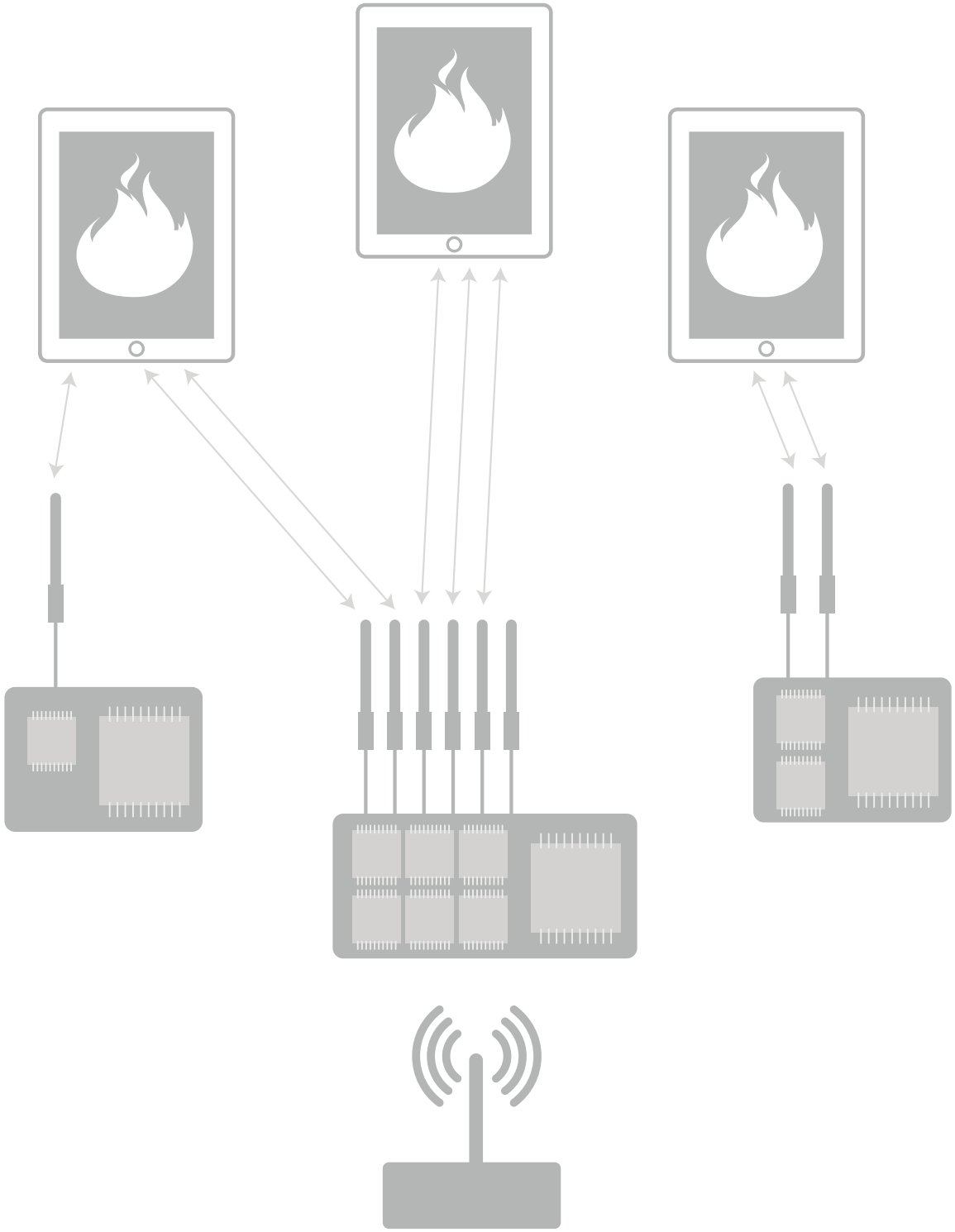
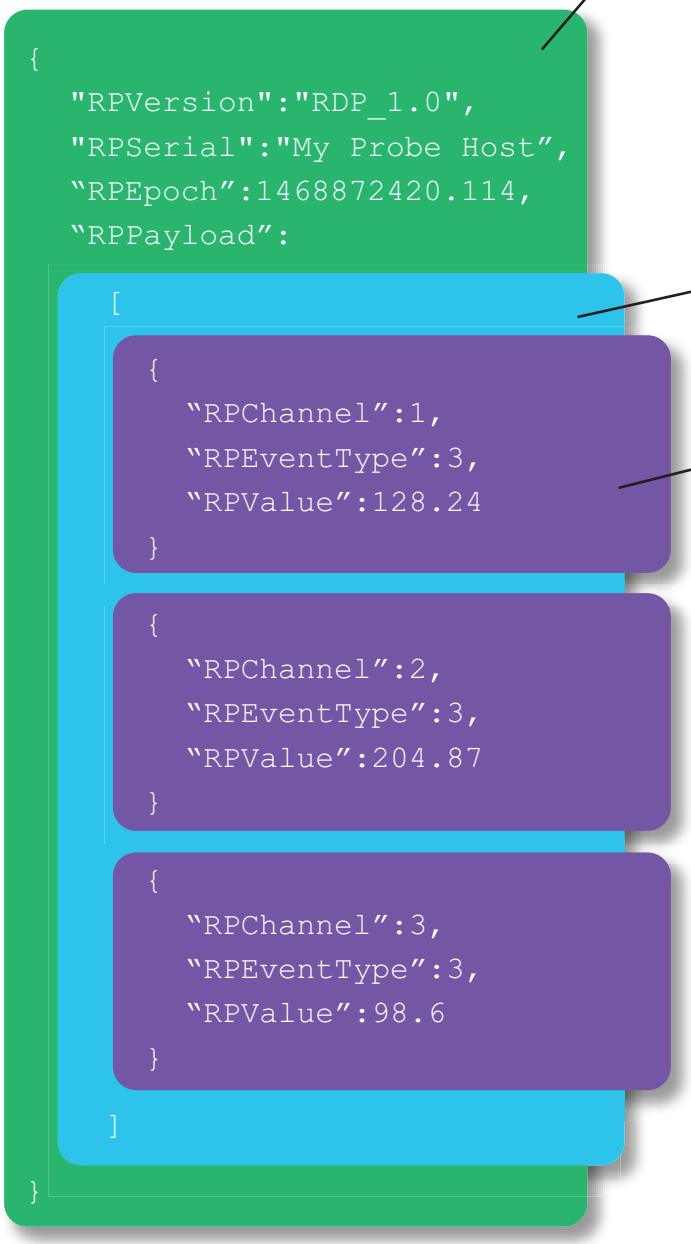
Roastmaster Datagram Protocol

RDP DataSheet



The Anatomy of an RDP Temperature Transmission



Datagram *Dictionary*

Key: **RPVersion** Value: **RDP1.0** *String*

Key: **RPSerial** Value: *String*

Denotes the serial number (string) of the probe hardware. This must match the value entered in a Roastmaster probe. You may have multiple hardware servers, each registered to different probes in Roastmaster at the same time.

Key: **Epoch** Value: *Double*

Tracking number supplied by client to ensure datagrams are processed in the corect order. Roastmaster keeps a counter at the port level. It is easiest to calculate the number of milliseconds since Unix Epoch Time (Jan 1, 1970) and supply this double-precision float. Alternatively, you can use your own integer counter. If this key/value pair is omitted, Roastmaster will process every packet in the order in which it is received.

Key: **RPPayload** Value: *Array of events*

Payload *Array of Dictionaries (Events)*

Event *Dictionary*

Key: **RPChannel** Value: *Integer*

Corresponds to the channel defined in the Roastmaster probe (1-16).

Key: **RPEventType** Value: *Integer*
(Event Type Temperature Constant)

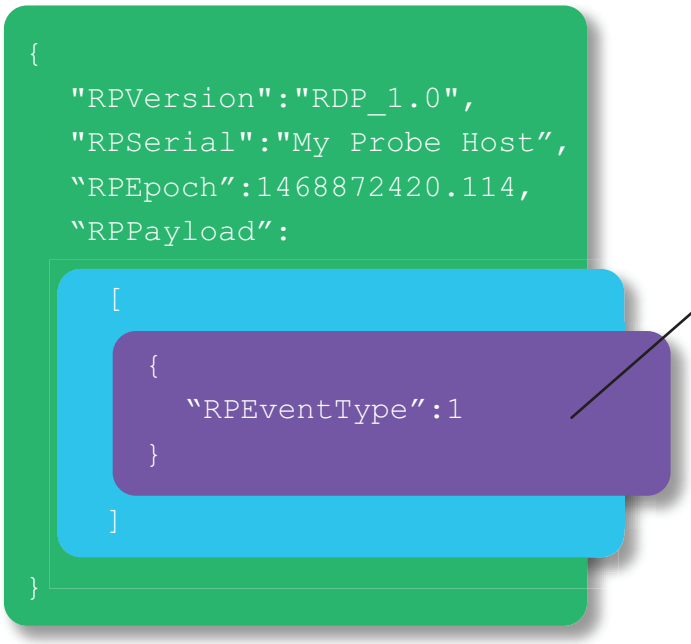
Key: **RPValue** Value: *Float*

Must be supplied in Celsius. Roastmaster will translate as appropriate, depending on the measurement system set in the curve using the probe.

RDP Event Type Integer Constants

Handshake Sync (SYN) = 1
Handshake Acknowledgment (ACK) = 2,
Temperature = 3,
//Remaining are unpublished

The Anatomy of an RDP Handshaking Transmission



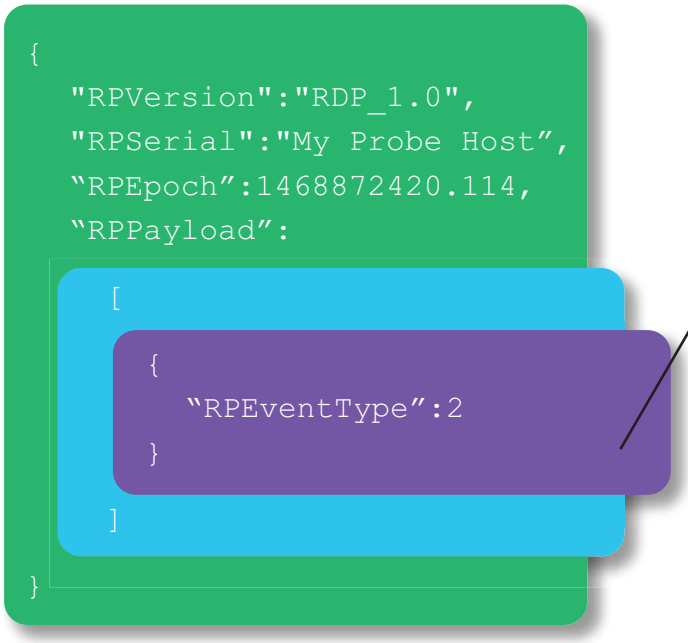
Synch (SYN) Datagram

Sent by a host (usually as a multicast) containing only one event with the SYN Event Type Constant Integer.

When Roastmaster receives a SYN request, it resets it Epoch value, and sends a corresponding Acknowledgement (ACK) datagram.

Event *Dictionary*

Key: **RPEventType** Value: *Integer*
(Event Type SYN Constant)



Achknowledgement (ACK) Datagram

Sent by the server (Roastmaster) whenever it receives an SYN datagram. One ACK is sent back to the orginating address of each SYN packet it receives.

The host should read this datagram, store the originating address, and switch to a temp sending state.

Event *Dictionary*

Key: **RPEventType** Value: *Integer*
(Event Type ACK Constant)

RDP Event Type Integer Constants

Handshake Sync (SYN) = 1
Handshake Acknowledgment (ACK) = 2,
Temperature = 3,
//Remaining are unpublished