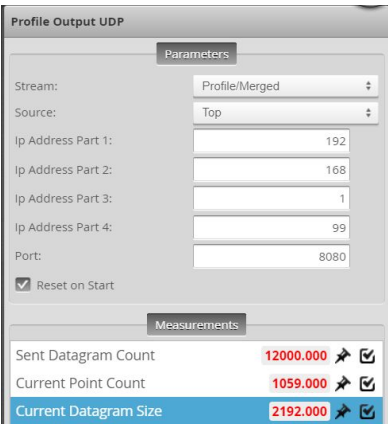


Profile Output Udp Tool User Manual

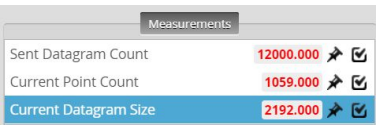
General introduction

This tool packages the profile data and some other required information into a datagram, and then sends it out through UDP protocol.

Parameters

Parameters	Description	
Stream	The data that the tool will apply measurements to. This setting is only displayed when data from another tool is available as input for this tool.	
Source	The sensor, or combination of sensors, that provides data for the tool's measurements	
IP Address Part 1-4	Destination IP Address	
Port	Destination Port	
Reset on Start	Reset the measurement Sent Datagram Count to zero when the sensor is started.	

Measurements

Measurements	Description	
Sent Datagram Count	The number of datagrams sent since the last reset	
Current Point Count	Point number of the current profile	
Current Datagram Size	Byte number of the current datagram, excluding the UDP header	

Datagram Content (Excluding the 8-byte UDP Header)

Please note that the ordering or sequence of bytes of each data section (e.g, Datagram version or Frame Index) follows [Little-Endian](#). Simply put, a little-endian architecture stores the least-significant byte of a multi-byte object at the lowest memory address of the storage location, and increases the address for each more significant byte.

- Version 1 (Being used currently)

Name	Description	Variable Type	Byte Count
Datagram Version	Used to maintain backward compatibility For version 1, Datagram Version is one intuitively	k16u	2
Frame Index	Frame index of message data (counts up from zero)	k64u	8
Time Stamp	Timestamp corresponding to message data	k64u	8
Data Offset	Contains x/y/z offset components	kPoint3d64f	24
Data Scale	Contains x/y/z scale components	kPoint3d64f	24
Data Type	Identical to the built-in type GdkDataType: 3 for uniform profile data 4 for profile point cloud	k32s	4
Point Count	Point number of the profile being transferred	k32u	4
Profile Point Array	Uniform Profile (i.e., Data Type == 3)	k16s (Array)	2*(Point Count)
	Profile Point Cloud (i.e., Data Type == 4)	GdkPointXZ16s (Array)	4*(Point Count)

Tips and Tricks

1. UDP from Emulator/Accelerator

When testing the tool with Emulator or Accelerator, the destination IP address could be anyone in the same subnetwork, for example, if the sensor IP address is 192.168.1.10 and the subnet mask is 255.255.255.0, then the UDP IP address could be anyone from 192.168.1.1 to 192.168.1.255

2. UDP from Sensor Directly

The destination IP address must be the broadcast address, i.e., **192.168.1.255** or **255.255.255.255**, given the sensor IP address is 192.168.1.10 and the subnet mask is 255.255.255.0