MD1230/MP1590 RateTool.exe Readme

January 12, 2011, ANRITSU CORPORATION

Introduction

Tx Stream of MD1230/MP1590 families do not support individual setting functionalities of TX rate or TX duration for each of multiple streams. RateTool.exe (hereafter, this program) is a tool to solve this problem to supply the setup functionalities of TX rates and TX durations for each of multiple streams.

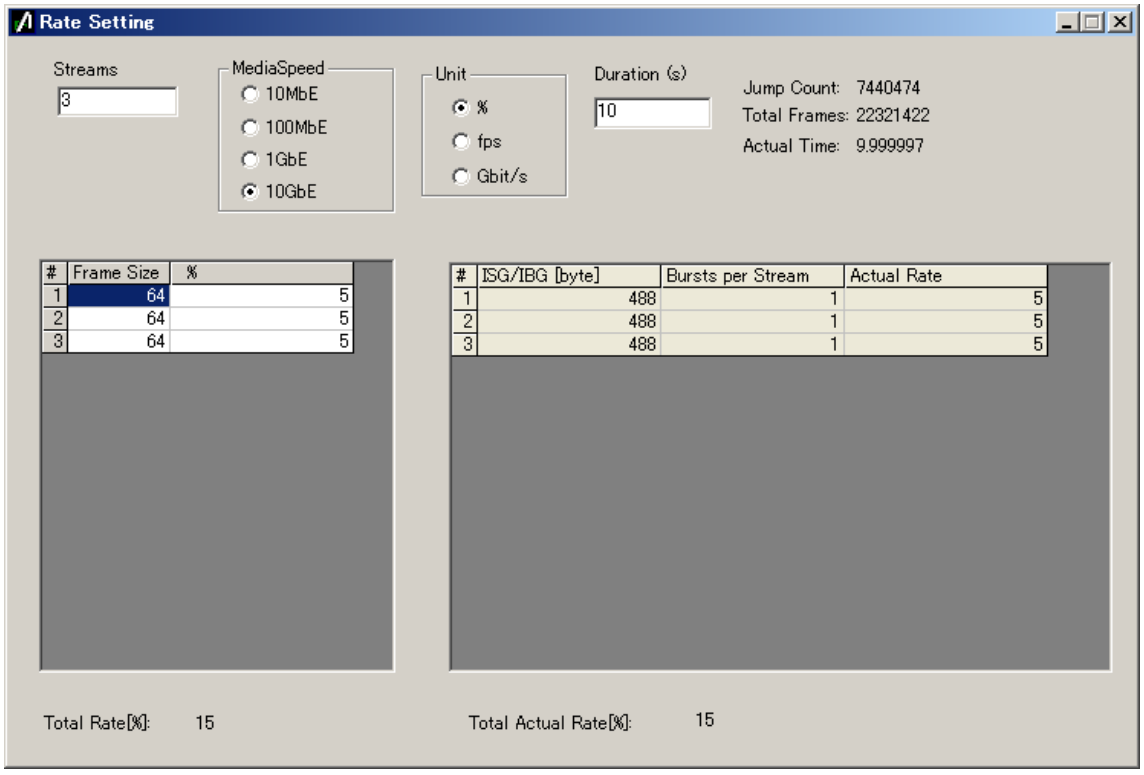
Program Installation

Copy this program (RateTool.exe) to the PC or the hard disk of MD1230/MP1590.

Using This Program

Setup procedures of TX rates and TX durations for multiple streams by using this program are shown below.

Double-click this program (RateTool.exe) to show the dialog box below. Setup information of streams to be transmitted by assigned rate and period will be shown as the result of TX rate or TX duration item entries.



Configurable items are shown in the table below.

Items	Description
Streams	Number of streams sets
Media Speed	Media speed of the Ethernet module
Unit	The unit for the values to be entered
Frame Size	The frame size of the transmission.
(%, fps, Gbit/s)	The unit for Tx frame entry of each stream
Duration	The duration of the transmission.

The following calculation results will be indicated. Entry failures will be alerted in red color on each related calculation result. Confirm the entries related to the alert in such cases.

Items	Description
ISG/IBG [byte]	The Inter Stream Gap and Inter Burst Gap for each stream
Bursts per Stream	The number of Bursts per each stream
Actual Rate	The actual rate of the transmission on which this calculation results are applied.
Jump Count	The Jump Count for the last stream.
Total Frames	The number of actual frames in the transmission on which this calculation results are applied.
Actual Time	The actual duration time of the transmission on which this calculation results are applied.
Total Rate [%] Total Actual Rate [%]	The total rate [%] by entries and the total rate [%] of the actual transmission on which this calculation results are applied.

The Tx Stream will be setup as follows by applying the calculation results of this program;

1. Create the stream settings of specific numbers assigned by this program.
2. Set Frame Length of each stream in the specific value assigned by this program. Set header/data patterns if necessary.
3. Set the Distribution for each stream as follows;

Items	Description
Last stream	Set to **Jump to Stream for Count and Stop** if TX duration is specified, or else set to **Jump to Stream**. (**Jump to ID** should be **1.**)
Other streams	Set to **Next Stream**.

4. Set Inter Stream Gap and Inter Burst Gap of each stream according to the calculation result of this program.
   * Setting of Inter Frame Gap is not required.
5. Set Burst per Stream of each stream according to the calculation result of this program.
   * Setting of Frames per Burst is not required.
6. Set Jump Count of the last stream according to the calculation values of this program.
   *No setting is required if the TX duration is not specified.

Restrictions

As far as applying the calculation results of this program, the following setups of streams should be fixed to the default values shown below. If not, the actual streams will not be equal to the expected results according to the calculations by this program.

- Preamble Size: 8 bytes
- Frames per Burst: 1