TS2000 4000 6000
Communication protocol

Baud rate: 9600 N 8 1
Serial line for:2-3 , 3-2 , 5-5

Instrument generating test seconds value, the real-time data transmission through a serial port to the PC

PC receiving the hexadecimal receiving mode, from the instrument of receiving the hexadecimal number, convert to a decimal number.
Data format (agreement) :
1 byte: no role

2 bytes: Project: 01 = PT, 02 = APTT, 03 = TT, 04= FIB

3 byte: sample number high
4 byte: sample number low For example 001 (note: the actual test value = high * 256 + low ,calculation method, the same)

5 byte: test time high
6 byte: test time low (of 12.5 assessment for example, the value of the serial port get after converting to get 125)

19 byte: slope high
20 bytes: slope low "y = ax + b" of "a" such as "a = 0.8451", the value of the serial port get after converting to get "8451". Then will the value divided by-10000, get the"-0.8451".

21 byte: intercept high
22 bytes: intercept low "y = ax + b" of "b" such as "b =3.137", the value of the serial port get after converting to get "3137". Then will the value divided by1000, get the "3.137".

FIB concentration formula: y = ax + b
y=Test Result (FIB)
Calculation method for:y take logarithms-->Generation into the formula(y=ax+b)-->Get x-->x take against several-->Get the final concentration

Due to the calculation precision, the chroma value will calculate with instrument shows that there is little different.

For example:

Accept of the results:

Hexadecimal results:01 04 00 06 00 99 03 E8 02 FF FF 64 FF FF 01 90 00 C8 27 7A 0D D7 02

The decimal:1 4 0 6 0 153 3 232 2 255 255 100 255 255 01 144 0 200 39 122 13 215 2

Project

2 bytes:

Project for 04= FIB

Sample ID

3 byte: sample number high

4 byte: sample number low

0*256+6=6， Sample ID = 6

Test time

5 byte: test time high

6 byte: test time low

0*256+153=153，

153/10=15.3 Test time=15.3

slope

19 byte: slope high

20 bytes: slope low

39*256+122=10106，

10106/(-10000)=-1.0106 slope a：-1.0106

intercept

21 byte: intercept high

22 bytes: intercept low

13*256+215=3543，

3543/(1000)=3.543 intercept b：3.543

The calculation of FIB concentration

(Log(Test time "y")-b)/a = x: (log（15.3）-3.543)/(-1.0106)=2.333

X take against several: 10^x = 10^2.333 = 215 mg/dL = 2.15 g/L