SelexOn™ Communication Protocol

V 1.10

OSANG HealthCare

1. Serial Property

- Baud rate : 115200 bps
- Parity : None
- Stop bit : 1bit
- Data length : 8bit

2. Data Communication Definition

1) Data Set

■ **Command Definition**

No	Data	Size	Value	Description	Remark
1	Request Data Mode	2byte	“ST”	Mode switching data transfer of meter	
2	Request Waiting Mode	2byte	“SE”	Request Waiting Mode change of a meter.	
3	Request Data Transmit	2byte	“SI”	(Request) Data Transmit of a meter.	
4	ACK	1byte	0x06	Response of command	ACK
5	ETX	2byte	0x0d +0x0a	Data End	\r + \n

2) Read Data

■ **Data Definition**

No	Data	Size	Value	Description	Remark
1	Data Count	4byte		Number of Data count	
2	OPID	16byte		Operator ID (16Digits)	
3	PID	16byte		Patient ID (16Digits)	
4	Date&Time	19byte		Date & Time (19Digits)	
5	Marker	9byte		Marker (9Digits)	
6	Result	13byte		Result (13Digits)	
7	Unit	6byte		Unit (6Digits)	
8	CheckSum	3byte		CheckSum(3Digits)	

■ **Change to data transfer mode**

Mode switching data transfer from PC to SelexOn meter (PC→ SelexOn meter): 4byte

Data	“ST “	ETX
value	0x53+ 0x54	0x0d + 0x0a

- Response (SelexOn meter → PC): 3byte

Data	"ACK "	ETX
value	0x06	0x0d + 0x0a

■ Data Request

PC requests all data to SelexOn meter.

- Request measure data(PC→ SelexOn meter) : 4byte

Data	"SI "	ETX
value	0x53+ 0x49	0x0d + 0x0a

- Response (SelexOn meter → PC)
  - **Header Data : 7byte**

Data	"SI"	Data Count(4byte)	ETX
value	0x53+ 0x49	$N^1N^2N^3N^4$	0x0d + 0x0a

⇨ NNNN = 1~1000 (if, there is no data : NNNN = 0)

⇨ $N^1N^2N^3N^4$ (4byte) = N^1 + 0x30, N^2 + 0x30, N^3 + 0x30, N^4 + 0x30

  - **Result data : 84byte**

Data	OPID	PAID	Date Time	Marker	Result Unit	Checksum	ETX
value	16byte	16byte	19byte	9byte	19byte	3byte	2byte

⇨ Add 0x30 to each digit to encode 1 byte of Ascii code

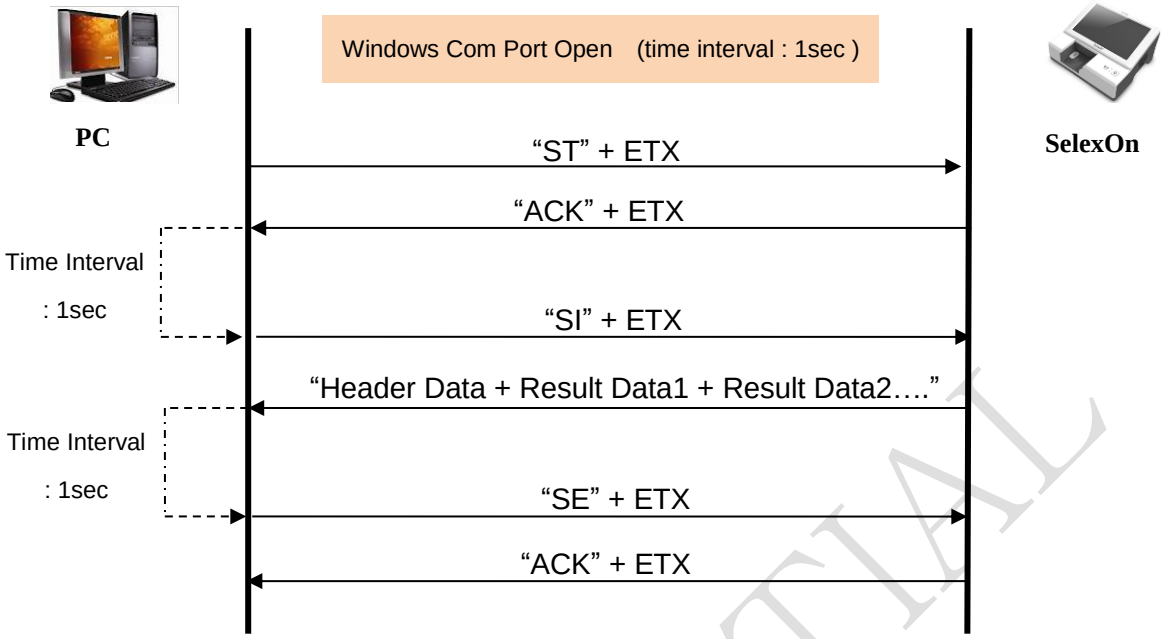
⇨ OPID/PAID : 16-digit barcode data

⇨ DATE&TIME : YYYY(year), MM(month), day + time + minute + second

⇨ Marker : "hs-CRP", "SingleRAW, "CK-MB", etc. Transmit the strings
Space are filled with 0x20

⇨ Result&Unit : 0x20 + .. + result value + 0x20 + Unit(string) + .. +0x20

⇨ Checksum : OPID + … + Result&Unit (Sum of each digit number)
Ascii code that the last digit of sum values



*If there is no data : “SI” + “0000” + 0x0d + 0x0a