

some examples of the raw data received from the IOLab system during a typical session.

#The contents of the return packet of the “get packet configuration”

command is described in detail.

More info can be found in the USB Interface Specification document

http://www.iolab.science/Documents/IOLab_Expert_Docs/IOLab_usb_interface_specs.pdf

ACK after a successful “set fixed configuration” command (0x26)

2 aa 1 26 a

record returned after we send a “get fixed configuration” command (0x27)

2 27 2 1 3 a

record returned after we send a “get packet configuration” command (0x28)

2 28 a 1 4 1 c 2 c 3 c c 4 a

bytes are as follows:

2: start of packet,

28: command, a: byte count, 1: remote number, 4: number of sensors,

1: first sensor number, c: Nbytes expected from first sensor

2: second sensor number, c: Nbytes expected from second sensor

3: third sensor number, c: Nbytes expected from third sensor

c: fourth sensor number, 4: Nbytes expected from fourth sensor

a: end of packet

ACK after a successful “start data” command (0x20)

2 aa 1 20 a

these are a series of asynchronous “data from remote” records received after

the data acquisition is started by the above command

2 41 35 1 8 1 4 81 c f3 98 1b b4 b 2c f3 90 1b b0 b 58 82 c f8 8b 5 51 7 10 f8 8d 5 52 7 1c 83 c f1
a2 3 42 ff b5 f1 59 3 53 ff b0 8c 4 8 0 8 0 36 a

2 41 35 1 9 0 4 81 c f3 98 1b b4 b 2c f3 90 1b b0 b 58 82 c f8 8b 5 51 7 10 f8 8d 5 52 7 1c 83 c f1
a2 3 42 ff b5 f1 59 3 53 ff b0 8c 4 8 0 8 0 36 a

2 41 35 1 a 0 4 1 6 f3 7c 1b a4 b 74 0 0 0 0 0 2 6 f8 8b 5 4e 7 15 f8 b0 5 3b 6 f3 3 6 f1 2c 3 56 ff
b0 f8 7a 1 9a 0 b c 2 7 ff 0 0 36 a

2 41 35 1 b 0 4 1 6 f3 84 1b b4 b 48 f3 90 1b b0 b 58 2 6 f8 8f 5 4b 7 a f8 8d 5 52 7 1c 3 6 f1 11 3
42 ff bb f1 59 3 53 ff b0 c 2 7 ff 8 0 36 a

2 41 35 1 c 0 4 1 6 f3 80 1b 94 b 70 0 0 0 0 0 2 6 f8 90 5 56 7 1c f8 b0 5 3b 6 f3 3 6 f3 30 3 16 ff
bb f8 7a 1 9a 0 b c 2 7 ff 0 0 36 a

2 41 35 1 d 0 4 1 6 f3 80 1b bc b 70 f3 90 1b b0 b 58 2 0 f8 8f 5 4b 7 a f8 8d 5 52 7 1c 3 6 f4 db 2
d7 ff c0 f1 59 3 53 ff b0 c 2 7 ff 8 0 36 a

2 41 35 1 e 0 4 1 6 f3 7c 1b ac b 64 0 0 0 0 0 2 6 f8 8b 5 51 7 10 f8 b0 5 3b 6 f3 3 6 f7 6f 2 53 ff
cb f8 7a 1 9a 0 b c 2 7 ff 0 0 36 a

2 41 35 1 f 0 4 1 6 f3 88 1b a8 b 90 f3 90 1b b0 b 58 2 6 f8 8c 5 50 7 1c f8 8d 5 52 7 1c 3 6 fa 52 1
ab ff dc f1 59 3 53 ff b0 c 2 8 0 8 0 36 a

2 41 35 1 10 0 4 1 6 f3 84 1b bc b 78 0 0 0 0 0 2 6 f8 91 5 56 7 1b f8 b0 5 3b 6 f3 3 6 fd 2f 0 ef ff
ea f8 7a 1 9a 0 b c 2 7 ff 0 0 36 a

2 41 35 1 11 0 4 1 6 f3 94 1b bc b 48 f3 90 1b b0 b 58 2 6 f8 8f 5 54 7 12 f8 8d 5 52 7 1c 3 6 ff d6
0 e ff f9 f1 59 3 53 ff b0 c 2 8 0 8 0 36 a

2 41 35 1 12 0 4 1 6 f3 78 1b b4 b 74 0 0 0 0 0 2 0 f8 91 5 56 7 1b f8 b0 5 3b 6 f3 3 6 ff fd ff f4 0
0 f8 7a 1 9a 0 b c 2 7 ff 0 0 36 a

2 41 35 1 13 0 4 1 6 f3 70 1b c8 b 60 f3 90 1b b0 b 58 2 6 f8 8d 5 50 7 16 f8 8d 5 52 7 1c 3 6 ff f7
ff fe 0 0 f1 59 3 53 ff b0 c 2 7 ff 8 0 36 a

2 41 35 1 14 0 4 1 6 f3 88 1b b8 b 54 0 0 0 0 0 2 6 f8 92 5 57 7 18 f8 b0 5 3b 6 f3 3 0 ff fd ff f4 0
0 f8 7a 1 9a 0 b c 2 7 ff 0 0 36 a

ACK after a successful "stop data" command (0x21)

2 aa 1 21 a