ANALOG INPUT DEVICE, COMPUTING SYSTEM AND METHOD FOR RECEIVING AND PROCESSING ANALOG INPUT

Abstract

An analog input device including at least one mounting panel and a matrix of analog push button assemblies mounted thereon. Each analog push button assembly including an analog pressure sensor including a pressure reception arrangement having an optical sensing sub-arrangement configured to measure an amount of light varied according to a pressure sensed at the pressure reception arrangement and an output terminal for outputting an analog signal corresponding to the amount of light measured, and a plunger element configured to exert the pressure on the pressure reception arrangement. The analog input device may include a multiplexer including an input side coupled to the push button assemblies and an output side; an analog-to-digital converter coupled to the output side of the multiplexer; a processor coupled to the analog-to-digital converter and configured to output a data packet; and a communication interface configured to transmit the data packet to a host computing device.

FIG. 1