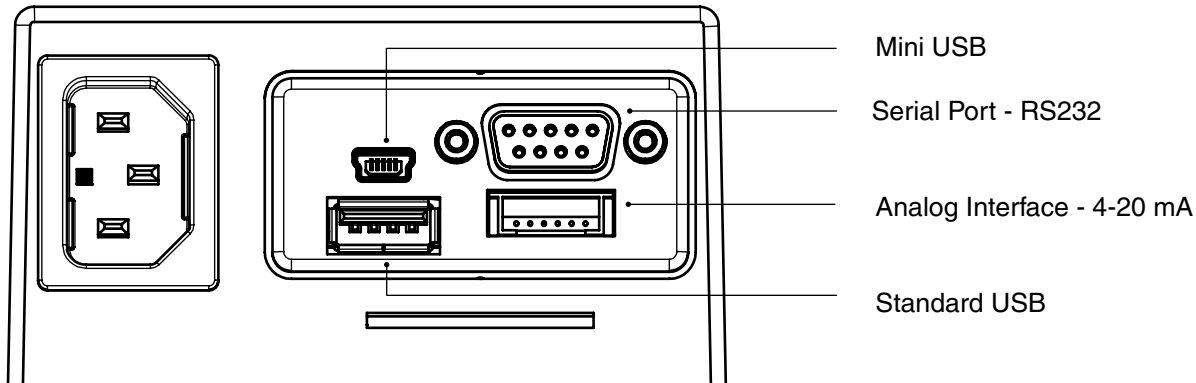


## Communications

Connect to external control or data logging sources with the following ports. Only one port may be used at any given time. Terminal is intended to be connected to non-hazardous secondary 35 VDC max, separated from mains with double reinforced insulation.

### Command Set



The following commands serve only as low level commands for the communication between the mixer and PC. Using a suitable terminal or communications program allows the commands to be transmitted directly to the mixer.

	Command	Description	Response
1	IN_NAME	Read device name	Mixer Name, Software Version
2	IN_PV_4	Read current speed integer	Current speed 4
3	IN_PV_5	Read current torque integer	Current torque 5
4	IN_SP_4	Read rated speed value	Rated speed 4
5	IN_SP_5	Read the torque limit value	Torque limit 5
6	START_4	Start the motor	Mixer starts 4
7	STOP_4	Stop the motor	Mixer pauses 4
8	RESET	Switch to local operation	No acknowledgement
9	IN_MODE	Read the direction of rotation	1(cw) or 2(ccw)
10	STATUS_X	Status output	TILT LIMIT STATUS OVERHEAT STATUS OVERLOAD STATUS QUICK STOP STATUS MOTOR OVERHEAT STATUS
11	IN_DATE	Gets the current Date and Time	YYYYMMDD, HH:MM:SS
12	SET_ACK_ON	Turns on Mixer acknowledgment from SET commands	OK
13	SET_ACK_OFF	Turns off command responses or acknowledgments	No acknowledgement
14	IN_HRS	Get total hours of operation of from mixer	HH:MM:SS
15	IN_DATE_S	Used to READ the last date of Service and Calibration	YYYYMMDD HH:MM:SS
16	IN_SERIAL	Used to READ the programmed serial number	Serial Number
17	OUT_SP_4 xxxx	Adjust the speed value (50 to 1500 max)	OK

## Communication Parameters

Parameter	Value
Baud Rate	9600
Parity	None
Data bits	8
Start bits	1
Stop bits	1
Break	500mS
Flow Control	None

## Command Syntax and Format

MIXER NAME represents the unique name of the mixer

COMMAND is any command from the Command Set table (as noted above)

DATA is the associated parameter to accompany a command

The following applies to the command set:

- Commands are generally sent from the computer (Master) to the mixer (Slave).
- The mixer sends only at the computer's request. Even fault indications cannot be sent spontaneously from the mixer to the computer (automation system). Except on power up when the mixer outputs its Model Number, Identifier or NAME and Firmware number during power-up initialization and will remain silent until spoken to over the communications buss.
- Commands are transmitted in capital letters.
- Commands and parameters including successive parameters are separated by at least one space (Code: hex 0x20).
- Each individual command (incl. parameters and data) and each response are terminated with Blank CR Blank LF (Code: hex 0x20 hex 0x0d hex 0x20 hex 0x0A) and have a maximum length of 80 characters.
- The decimal separator in a number is a dot (Code: hex 0x2E).