



DMI Inclinometer Data Format

Format Summary

The data stream from the DMI is formatted as a set of 14 hexadecimal octets. Attempting to view or parse the data as an ASCII string will likely prove to be difficult, but information on the ASCII translations are included here to aid in making sense of the data stream in a standard RS232 terminal, such as Tera Term or HyperTerminal.

Each data set begins with the four octets 68 0D 00 84. This hexadecimal string can be used to identify the start of a set.

Following the start of data set will be two sets of three octets representing the measured angles for the X and Y axis. The first of the three octets represents whether or not the value is positive or negative. An octet holding a hexadecimal value of 00 represents a positive angle while a value of 10 represents a negative angle.

The remaining two octets represent the measured angle for each axis. The first of these octets represents the integer portion of the value. The second represents the decimal portion of the value.

Although these are hexadecimal values they should be used for their decimal face value.

Example Data Sets

Hex	68	0D	00	84	10	00	29	00	00	44	00	00	00	0E
Decimal	104	13	0	132	16	0	41	0	0	68	0	0	0	14
ASCII	h	CR	NUL	ä	DLE	NUL)	0	0	D	NUL	NUL	NUL	SO
Use	Start of data set				Y +/-	Y value		X +/-	X Value		Unused data			
					-0.29°			0.44°						

Hex	68	0D	00	84	00	30	00	00	00	46	00	00	00	07
Decimal	104	13	0	132	0	48	0	0	0	70	0	0	0	7
ASCII	h	CR	NUL	ä	NUL	0	NUL	NUL	NUL	F	NUL	NUL	NUL	BEL
Use	Start of data set				Y +/-	Y value		X +/-	X Value		Unused data			
					30°			0.46°						

Hex	68	0D	00	84	10	30	00	10	00	83	00	00	00	64
Decimal	104	13	0	132	16	48	0	16	0	131	0	0	0	100
ASCII	h	CR	NUL	ä	DLE	0	NUL	DLE	NUL	â	NUL	NUL	NUL	d
Use	Start of data set				Y +/-	Y value		X +/-	X Value		Unused data			
					30°			-0.83°						

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For pricing or any further information, please contact Omni Instruments Ltd.