

Table 1

STATION REQUIREMENTS FOR AN ISMS STANDARD STATION

Category	Requirement
Pass Band	.02-20 Hz (Alpha and Beta)*
Seismometer Noise	10 dB below Petersons low earth noise model
Calibration	within 5% in amplitude and 5° in phase
Sample Rate	40 samples per second ($\pm 50 \mu s$)
Resolution	18 dB below Petersons low noise model
Sensitivity	200 counts/nm @ 3 Hz
System Noise	10 dB below Petersons low earth noise curve
Dynamic Range	126 dB
Linearity	90 dB over the pass band
Timing Accuracy	1 ms (Network standard timing required)
Operating Temperature	-10° C to 45° C
Authentication	required
State of Health	a minimum of clock status, calibration status, and vault status
Format	must be one of the official GSE formats
Protocol	TCP/IP (beta)
Delay in Transmission	< 15 seconds
Data Frame Length	< 1 second
Data Access	Priority given to IDC, then NDC
Disk Buffer	7 days
Data Availability	greater than 99%
Timely Data Transmission	greater than 98%
Station Location	known within 100 m; relative location of array elements
	known to within 1 metre
Seismometer Orientation	known within 1 degree

* 8.0 hertz for stations with "unique" capabilities