

Logging Capacity of TROLL® Data Loggers

Aqua TROLL, Level TROLL, Baro TROLL, Rugged TROLL and Rugged Baro TROLL Loggers

Overview

This technical note outlines the data log capacity of TROLL Data Loggers. Use the tables provided to help plan long-term logging deployments. Note that the tables provide the minimum number of data records that can be stored under the specified conditions. In some conditions, data loggers may store additional data records; however, those conditions cannot be guaranteed.

Wrap Condition Disabled

When the wrap condition is disabled, the data loggers will stop logging data when the data log memory is full. This mode provides the largest number of stored data records. See Table 1. Identify the instrument in the left-hand column, then identify number of parameters to be logged. The value in the table is the minimum number of data records that can be stored.

Calculation Example

Consider, for example, a Level TROLL 500 that will be deployed to record all three of its parameters (pressure, temperature, and level). Use the wrap condition to eliminate instrument reprogramming steps when data is retrieved. At least 93,600 data records can be stored (see Table 2). If a 5-minute recording interval is used, the instrument can be deployed for 325 days before it fills and begins to wrap its log.

Table 1. Minimum number of data records that can be stored when wrap condition is disabled

Instrument	Memory	Parameters								
		1	2	3	4	5	6	7	8	9
Rugged BaroTROLL	2 MB	184,667	126,945	96,720	—	—	—	—	—	—
Rugged TROLL 100	2 MB	184,677	126,945	96,720	—	—	—	—	—	—
Rugged TROLL 200	2 MB	184,677	126,945	96,720	—	—	—	—	—	—
Baro TROLL	1 MB	89,355	61,425	—	—	—	—	—	—	—
Level TROLL 400	2 MB	184,667	126,945	96,720	—	—	—	—	—	—
Level TROLL 500	2 MB	184,677	126,945	96,720	—	—	—	—	—	—
Level TROLL 700/700H	4 MB	375,219	257,985	196,560	—	—	—	—	—	—
Aqua TROLL 100	4 MB	375,219	257,985	196,560	158,760	113,119	114,660	100,674	—	—
Aqua TROLL 200	4 MB	375,219	257,985	196,560	158,760	113,119	114,660	100,674	89,712	80,892

Table 2. Minimum number of data records that can be stored when wrap condition is enabled

Instrument	Memory	Parameters								
		1	2	3	4	5	6	7	8	9
Rugged Baro TROLL	2 MB	178,710	122,850	93,600	—	—	—	—	—	—
Rugged TROLL 100	2 MB	178,710	122,850	93,600	—	—	—	—	—	—
Rugged TROLL 200	2 MB	178,710	122,850	93,600	—	—	—	—	—	—
Baro TROLL	1 MB	83,398	57,330	—	—	—	—	—	—	—
Level TROLL 400	2 MB	178,710	122,850	93,600	—	—	—	—	—	—
Level TROLL 500	2 MB	178,710	122,850	93,600	—	—	—	—	—	—
Level TROLL 700/700H	4 MB	369,334	253,890	193,440	—	—	—	—	—	—
Aqua TROLL 100	4 MB	369,334	253,890	193,440	156,240	131,006	112,840	99,076	—	—
Aqua TROLL 200	4 MB	369,334	253,890	193,440	156,240	131,006	112,840	99,076	88,288	79,608