5.5.6 Normal Mode datagram

Table 5-20: Specification of the Normal Mode datagram (full data content in datagram)

Byte#	Bit#								Specification
	7	6	5	4	3	2	1	0	
0	1	0	1	0	1	1	1	1	Normal Mode datagram identifier for Normal Mode datagram with full content. Identifier for reduced content datagrams can be found in Table 5-21
1	Gx_{23}	Gx_{22}	Gx_{21}	Gx_{20}	Gx_{19}	Gx_{18}	Gx_{17}	Gx_{16}	X-axis gyro output, ref. section 7.5.2.2.2 to 7.5.2.2.5 for conversion to units
2	Gx_{15}	Gx_{14}	Gx_{13}	Gx_{12}	G_{11}	Gx_{10}	Gx_{9}	Gx_{8}	
3	Gx_{7}	Gx_{6}	Gx_{5}	Gx_{4}	Gx_{3}	Gx_{2}	Gx_{1}	Gx_{0}	
4	Gy_{23}	Gy_{22}	Gy_{21}	Gy_{20}	Gy_{19}	Gy_{18}	Gy_{17}	Gy_{16}	Y-axis gyro output, ref. section 7.5.2.2.2 to 7.5.2.2.5 for conversion to units
5	Gy_{15}	Gy_{14}	Gy_{13}	Gy_{12}	Gy_{11}	Gy_{10}	Gy_{9}	Gy_{8}	
6	Gy_{7}	Gy_{6}	Gy_{5}	Gy_{4}	Gy_{3}	Gy_{2}	Gy_{1}	Gy_{0}	
7	Gz_{23}	Gz_{22}	Gz_{21}	Gz_{20}	Gz_{19}	Gz_{18}	Gz_{17}	Gz_{16}	Z-axis gyro output, ref. section 7.5.2.2.2 to 7.5.2.2.5 for conversion to units
8	Gz_{15}	Gz_{14}	Gz_{13}	Gz_{12}	Gz_{11}	Gz_{10}	Gz_{9}	Gz_{8}	
9	Gz_{7}	Gz_{6}	Gz_{5}	Gz_{4}	Gz_{3}	Gz_{2}	Gz_{1}	Gz_{0}	
10	Gs_{7}	Gs_{6}	Gs_{5}	Gs_{4}	Gs_{3}	Gs_{2}	Gs_{1}	Gs_{0}	STATUS byte for gyro measurements, ref.Table 5-23
11	Ax_{23}	Ax_{22}	Ax_{21}	Ax_{20}	Ax_{19}	Ax_{18}	Ax_{17}	Ax_{16}	X-axis accelerometer output, ref. section 7.5.2.2.7 to 7.5.2.2.10 for conversion to units
12	Ax_{15}	Ax_{14}	Ax_{13}	Ax_{12}	Ax_{11}	Ax_{10}	Ax_{9}	Ax_{8}	
13	Ax_{7}	Ax_{6}	Ax_{5}	Ax_{4}	Ax_{3}	Ax_{2}	Ax_{1}	Ax_{0}	
14	Ay_{23}	Ay_{22}	Ay_{21}	Ay_{20}	Ay_{19}	Ay_{18}	Ay_{17}	Ay_{16}	Y-axis accelerometer output, ref. section 7.5.2.2.7 to 7.5.2.2.10 for conversion to units
15	Ay_{15}	Ay_{14}	Ay_{13}	Ay_{12}	Ay_{11}	Ay_{10}	Ay_{9}	Ay_{8}	
16	Ay_{7}	Ay_{6}	Ay_{5}	Ay_{4}	Ay_{3}	Ay_{2}	Ay_{1}	Ay_{0}	
17	Az_{23}	Az_{22}	Az_{21}	Az_{20}	Az_{19}	Az_{18}	Az_{17}	Az_{16}	Z-axis accelerometer output, ref. section 7.5.2.2.7 to 7.5.2.2.10 for conversion to units
18	Az_{15}	Az_{14}	Az_{13}	Az_{12}	Az_{11}	Az_{10}	Az_{9}	Az_{8}	
19	Az_{7}	Az_{6}	Az_{5}	Az_{4}	Az_{3}	Az_{2}	Az_{1}	Az_{0}	
20	As_{7}	As_{6}	As_{5}	As_{4}	As_{3}	As_{2}	As_{1}	As_{0}	STATUS byte for accelerometer measurements, ref.Table 5-23
21	Ix_{23}	Ix_{22}	Ix_{21}	Ix_{20}	Ix_{19}	Ix_{18}	Ix_{17}	Ix_{16}	X-axis Inclinometer output, ref. section 7.5.2.2.11 to 7.5.2.2.14 for conversion to units
22	Ix_{15}	Ix_{14}	Ix_{13}	Ix_{12}	Ix_{11}	Ix_{10}	Ix_{9}	Ix_{8}	
23	Ix_{7}	Ix_{6}	Ix_{5}	Ix_{4}	Ix_{3}	Ix_{2}	Ix_{1}	Ix_{0}	
24	Iy_{23}	Iy_{22}	Iy_{21}	Iy_{20}	Iy_{19}	Iy_{18}	Iy_{17}	Iy_{16}	Y-axis Inclinometer output, ref. section 7.5.2.2.11 to 7.5.2.2.14 for conversion to units
25	Iy_{15}	Iy_{14}	Iy_{13}	Iy_{12}	Iy_{11}	Iy_{10}	Iy_{9}	Iy_{8}	
26	Iy_{7}	Iy_{6}	Iy_{5}	Iy_{4}	Iy_{3}	Iy_{2}	Iy_{1}	Iy_{0}	
27	Iz_{23}	Iz_{22}	Iz_{21}	Iz_{20}	Iz_{19}	Iz_{18}	Iz_{17}	Iz_{16}	Z-axis Inclinometer output, ref. section 7.5.2.2.11 to 7.5.2.2.14 for conversion to units
28	Iz_{15}	Iz_{14}	Iz_{13}	Iz_{12}	Iz_{11}	Iz_{10}	Iz_{9}	Iz_{8}	
29	Iz_{7}	Iz_{6}	Iz_{5}	Iz_{4}	Iz_{3}	Iz_{2}	Iz_{1}	Iz_{0}	
30	Is_{7}	Is_{6}	Is_{5}	Is_{4}	Is_{3}	Is_{2}	Is_{1}	Is_{0}	STATUS byte for inclinometer measurements, ref.Table 5-23
31	GTx_{15}	GTx_{14}	GTx_{13}	GTx_{12}	GTx_{11}	GTx_{10}	GTx_{9}	GTx_{8}	X-axis gyro temperature data, ref. section 7.5.2.2.15 for conversion to units
32	GTx_{7}	GTx_{6}	GTx_{5}	GTx_{4}	GTx_{3}	GTx_{2}	GTx_{1}	GTx_{0}	
33	Gty_{15}	Gty_{14}	Gty_{13}	Gty_{12}	Gty_{11}	Gty_{10}	Gty_{9}	Gty_{8}	Y-axis gyro temperature data, ref. section 7.5.2.2.15 for conversion to units
34	Gty_{7}	Gty_{6}	Gty_{5}	Gty_{4}	Gty_{3}	Gty_{2}	Gty_{1}	Gty_{0}	
35	GTz_{15}	GTz_{14}	GTz_{13}	GTz_{12}	GTz_{11}	GTz_{10}	GTz_{9}	GTz_{8}	Z-axis gyro temperature data, ref. section 7.5.2.2.15 for conversion to units
36	GTz_{7}	GTz_{6}	GTz_{5}	GTz_{4}	GTz_{3}	GTz_{2}	GTz_{1}	GTz_{0}	
37	GTs_{7}	GTs_{6}	GTs_{5}	GTs_{4}	GTs_{3}	GTs_{2}	GTs_{1}	GTs_{0}	STATUS byte for gyro temperature measurements, ref.Table 5-23
38	Atx_{15}	Atx_{14}	Atx_{13}	Atx_{12}	Atx_{11}	Atx_{10}	Atx_{9}	Atx_{8}	X-axis accelerometer temperature data, ref. section 7.5.2.2.15 for conversion to units
39	Atx_{7}	Atx_{6}	Atx_{5}	Atx_{4}	Atx_{3}	Atx_{2}	Atx_{1}	Atx_{0}	
40	Aty_{15}	Aty_{14}	Aty_{13}	Aty_{12}	Aty_{11}	Aty_{10}	Aty_{9}	Aty_{8}	Y-axis accelerometer temperature data, ref. section 7.5.2.2.15 for conversion to units
41	Aty_{7}	Aty_{6}	Aty_{5}	Aty_{4}	Aty_{3}	Aty_{2}	Aty_{1}	Aty_{0}	
42	Atz_{15}	Atz_{14}	Atz_{13}	Atz_{12}	Atz_{11}	Atz_{10}	Atz_{9}	Atz_{8}	Z-axis accelerometer temperature data, ref. section 7.5.2.2.15 for conversion to units
43	Atz_{7}	Atz_{6}	Atz_{5}	Atz_{4}	Atz_{3}	Atz_{2}	Atz_{1}	Atz_{0}	
44	Ats_{7}	Ats_{6}	Ats_{5}	Ats_{4}	Ats_{3}	Ats_{2}	Ats_{1}	Ats_{0}	STATUS byte for accelerometer temperature measurements, ref.Table 5-23
45	Itx_{15}	Itx_{14}	Itx_{13}	Itx_{12}	Itx_{11}	Itx_{10}	Itx_{9}	Itx_{8}	X-axis inclinometer temperature data, ref. section 7.5.2.2.15 for conversion to units
46	Itx_{7}	Itx_{6}	Itx_{5}	Itx_{4}	Itx_{3}	Itx_{2}	Itx_{1}	Itx_{0}	
47	Ity_{15}	Ity_{14}	Ity_{13}	Ity_{12}	Ity_{11}	Ity_{10}	Ity_{9}	Ity_{8}	Y-axis inclinometer temperature data, ref. section 7.5.2.2.15 for conversion to units
48	Ity_{7}	Ity_{6}	Ity_{5}	Ity_{4}	Ity_{3}	Ity_{2}	Ity_{1}	Ity_{0}	
49	Itz_{15}	Itz_{14}	Itz_{13}	Itz_{12}	Itz_{11}	Itz_{10}	Itz_{9}	Itz_{8}	Z-axis inclinometer temperature data, ref. section 7.5.2.2.15 for conversion to units
50	Itz_{7}	Itz_{6}	Itz_{5}	Itz_{4}	Itz_{3}	Itz_{2}	Itz_{1}	Itz_{0}	
51	Its_{7}	Its_{6}	Its_{5}	Its_{4}	Its_{3}	Its_{2}	Its_{1}	Its_{0}	STATUS byte for inclinometer temperature measurements, ref.Table 5-23
52	Au_{23}	Au_{22}	Au_{21}	Au_{20}	Au_{19}	Au_{18}	Au_{17}	Au_{16}	AUX output
53	Au_{15}	Au_{14}	Au_{13}	Au_{12}	Au_{11}	Au_{10}	Au_{9}	Au_{8}	
54	Au_{7}	Au_{6}	Au_{5}	Au_{4}	Au_{3}	Au_{2}	Au_{1}	Au_{0}	
55	Aus_{7}	Aus_{6}	Aus_{5}	Aus_{4}	Aus_{3}	Aus_{2}	Aus_{1}	Aus_{0}	STATUS byte for AUX measurement, ref.Table 5-23
56	n_{7}	n_{6}	n_{5}	n_{4}	n_{3}	n_{2}	n_{1}	n_{0}	Counter, ref.section 7.5.2.2.17
57	t_{15}	t_{14}	t_{13}	t_{12}	t_{11}	t_{10}	t_{9}	t_{8}	Latency, ref. Section 7.5.2.2.18 for conversion to units.
58	t_{7}	t_{6}	t_{5}	t_{4}	t_{3}	t_{2}	t_{1}	t_{0}	
59	c_{31}	c_{30}	c_{29}	c_{28}	c_{27}	c_{26}	c_{25}	c_{24}	Cyclic Redundancy Check is performed on all preceding bytes, ref:section 5.5.7
60	c_{23}	c_{22}	c_{21}	c_{20}	c_{19}	c_{18}	c_{17}	c_{16}	
61	c_{15}	c_{14}	c_{13}	c_{12}	c_{11}	c_{10}	c_{9}	c_{8}	
62	c_{7}	c_{6}	c_{5}	c_{4}	c_{3}	c_{2}	c_{1}	c_{0}	
(63)	0	0	0	0	1	1	0	1	<CR> If datagram termination has been selected
(64)	0	0	0	0	1	0	1	0	<LF> If datagram termination has been selected

Normal Mode datagrams with reduced content can be chosen at order or configured in Service Mode. Overview of available datagrams can be found in Table 5-21 and in section 12. When choosing a Normal mode datagram with