Document Number: DOC2021PD01

ACU SNMP

Simple network management protocol table for ACU

November 15, 2021

Version 1.2

Revision History

The following table shows all revisions for this document. Refer to this information to verify that you have the latest version.

Revision	*Date (YYYY/MM/DD)*	*Description*	*Writer*
1.000	2021/02/01	◆ Start of release.	Wang Hyunho
1.100	2021/02/26	◆ Added appendix A to E.	Wang Hyunho
1.200	2021/11/15	◆ Added BUC Information. ◆ Edited appendix for M4M.	Wang Hyunho

ACU SNMP

From January 2021, **Antenna Control Unit (ACU)** of KNS officially supports SNMP. ACU's SNMP is supported up to version 0.2, and version 0.3 is not planned for support. Developers can access by OID (Plan to support MIB Table).

Features

- Monitoring of most antenna status values.
- Antenna main function setting.
- SNMP version 2.0 support
- OID accessible

Support Models

- C4 Series
- C5 Series
- MK4 Series
- MK3M Series
- M4M Series

* Supported from products released after January 2021.

Commands Table

The table has a total of 68 OIDs. There are 68 OIDs for antenna and component status checks and 16 for antenna control.

No.	Name	OID	Access Type	Page
1	Driving Function	.1.3.6.1.2.1.8800.1.1	Get/Set	6
2	Static Function	.1.3.6.1.2.1.8800.1.2	Get/Set	6
3	Tracking Function	.1.3.6.1.2.1.8800.1.3	Get/Set	7
4	Searching Function	.1.3.6.1.2.1.8800.1.4	Get/Set	7
5	Operating Mode	.1.3.6.1.2.1.8800.1.5	Get/Set	8
6	Skew Mode	.1.3.6.1.2.1.8800.1.6	Get/Set	9
7	Skew	.1.3.6.1.2.1.8800.1.7	Get/Set	9
8	Elevation	.1.3.6.1.2.1.8800.1.8	Get/Set	10
9	Azimuth	.1.3.6.1.2.1.8800.1.9	Get/Set	10
10	Latitude	.1.3.6.1.2.1.8800.1.10	Get/Set	11
11	Longitude	.1.3.6.1.2.1.8800.1.11	Get/Set	11
12	Heading	.1.3.6.1.2.1.8800.1.12	Get/Set	12
13	Antenna Power	.1.3.6.1.2.1.8800.1.13	Get/Set	13
14	BUC Power	.1.3.6.1.2.1.8800.1.14	Get/Set	13
15	NIM AGC	.1.3.6.1.2.1.8800.1.15	Get	14
16	NIM Quality	.1.3.6.1.2.1.8800.1.16	Get	14
17	RSSD	.1.3.6.1.2.1.8800.1.17	Get	14
18	RSSD CN	.1.3.6.1.2.1.8800.1.18	Get	14
19	GPS Status	.1.3.6.1.2.1.8800.1.19	Get	15
20	GPS Latitude	.1.3.6.1.2.1.8800.1.20	Get	15
21	GPS Longitude	.1.3.6.1.2.1.8800.1.21	Get	15
22	GPS Speed	.1.3.6.1.2.1.8800.1.22	Get	16
23	GPS Angle	.1.3.6.1.2.1.8800.1.23	Get	16
24	External GPS	.1.3.6.1.2.1.8800.1.24	Get	16
25	External Searching Reference	.1.3.6.1.2.1.8800.1.25	Get	17
26	External Tracking Reference	.1.3.6.1.2.1.8800.1.26	Get	17
27	External Searching Threshold	.1.3.6.1.2.1.8800.1.27	Get	17
28	Satellite Channel ID	.1.3.6.1.2.1.8800.1.28	Get/Set	18
29	Satellite Name	.1.3.6.1.2.1.8800.1.29	Get	18
30	Satellite Position	.1.3.6.1.2.1.8800.1.30	Get	19
31	Satellite Band	.1.3.6.1.2.1.8800.1.31	Get	19
32	Satellite RX Polarity	.1.3.6.1.2.1.8800.1.32	Get	19

33	Satellite TRX Polarity	.1.3.6.1.2.1.8800.1.34	Get	20
34	Satellite Searching Reference	.1.3.6.1.2.1.8800.1.35	Get	20
35	Satellite Tracking Reference	.1.3.6.1.2.1.8800.1.36	Get	20
36	Driving Status	.1.3.6.1.2.1.8800.1.37	Get	21
37	Gyro Status	.1.3.6.1.2.1.8800.1.38	Get	21
38	Tilt (C Series Only)	.1.3.6.1.2.1.8800.1.39	Get	22
39	Level (C Series Only)	.1.3.6.1.2.1.8800.1.40	Get	22
40	Yaw (C Series Only)	.1.3.6.1.2.1.8800.1.41	Get	22
41	Reference Bank (C Series Only)	.1.3.6.1.2.1.8800.1.42	Get	23
42	Reference Elevation (C Series Only)	.1.3.6.1.2.1.8800.1.43	Get	23
43	Reference Azimuth (C Series Only)	.1.3.6.1.2.1.8800.1.44	Get	23
44	AHRS Roll (C Series Only)	.1.3.6.1.2.1.8800.1.45	Get	24
45	AHRS Pitch (C Series Only)	.1.3.6.1.2.1.8800.1.46	Get	24
46	AHRS Yaw (C Series Only)	.1.3.6.1.2.1.8800.1.47	Get	24
47	Reference Frequency Input	.1.3.6.1.2.1.8800.1.48	Get	25
48	ACU Temperature	.1.3.6.1.2.1.8800.1.49	Get	25
49	PCU Temperature	.1.3.6.1.2.1.8800.1.50	Get	25
50	ACU Current	.1.3.6.1.2.1.8800.1.51	Get	26
51	PCU Current	.1.3.6.1.2.1.8800.1.52	Get	26
52	ACU Serial Number	.1.3.6.1.2.1.8800.1.53	Get	27
53	ACU Part Number	.1.3.6.1.2.1.8800.1.54	Get	27
54	Antenna Serial Number	.1.3.6.1.2.1.8800.1.55	Get	27
55	Function Code	.1.3.6.1.2.1.8800.1.56	Get	28
56	Error Code	.1.3.6.1.2.1.8800.1.57	Get	28
57	BUC Output Power	.1.3.6.1.2.1.8800.1.60	Get	29
58	BUC Temperature	.1.3.6.1.2.1.8800.1.61	Get	29
59	BUC Supply Voltage	.1.3.6.1.2.1.8800.1.62	Get	29
60	BUC Attenuation	.1.3.6.1.2.1.8800.1.63	Get	30
61	BUC TX On	.1.3.6.1.2.1.8800.1.64	Get	30
62	BUC Fan On	.1.3.6.1.2.1.8800.1.65	Get	30
63	BUC PLL Lock	.1.3.6.1.2.1.8800.1.66	Get	31
64	BUC External Mute	.1.3.6.1.2.1.8800.1.67	Get	31
65	BUC Over Power	.1.3.6.1.2.1.8800.1.68	Get	31
66	BUC Over Temperature	.1.3.6.1.2.1.8800.1.69	Get	32
67	BUC Model Type	.1.3.6.1.2.1.8800.1.70	Get	32
68	BUC Data In	.1.3.6.1.2.1.8800.1.71	Get	33

Commands

Define the descriptions and parameters of the commands.

1. Driving Function
    - Description: Check and control the driving function of the antenna
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.1`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.1`
    - Return value
        ① 0 – Driving function off
        ② 1 – Driving function on

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.1 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.1`
    - Setting value: `X`
        ① 0 – Driving function off
        ② 1 – Driving function on

2. Static Function
    - Description: Check and control the static function of the antenna.
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.2`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.2`
    - Return value
        ① 0 – Static function off
        ② 1 – Static function on

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.2 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.2`
    - Setting value: `X`
        ① 0 – Static function off
        ② 1 – Static function on

3. Tracking Function
    - Description: Check and control the tracking function of the antenna
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.3`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.3`
    - Return value
        ① 0 – Tracking function off
        ② 1 – Tracking function on

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.3 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.3`
    - Setting value: `X`
        ① 0 – Tracking function off
        ② 1 – Tracking function on

4. Searching Functions
    - Description: Check and control the searching function of the antenna.
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.4`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.4`
    - Return value
        ① 0 – Searching function off
        ② 1 – Searching function on

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.4 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.4`
    - Setting value: `X`
        ① 0 – Searching function off
        ② 1 – Searching function on

5. Operating Mode

- Description: Check and control the operating mode of the antenna
- Access Type: Get/Set
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.5`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.5`
- Return value
  ① 0 – Stand by
  ② 1 – Manual Point
  ③ 2 – Manual Searching
  ④ 3 – Auto Searching

2) Set

`snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.5 X`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.5`
- Setting value: `X`
  ① 0 – Stand by
  ② 1 – Manual Point
  ③ 2 – Manual Searching
  ④ 3 – Auto Searching

6. Skew Mode
    - Description: Check and control the skew mode of the antenna
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.6`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.6`
    - Return value
        ① 0 – Automatic
        ② 1 – Manual
        ③ 2 – Set to peak
        ④ 3 – Peak reset

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.6 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.6`
    - Setting value: `X`
        ① 0 – Automatic
        ② 1 – Manual
        ③ 2 – Set to peak
        ④ 3 – Peak reset

7. Skew
    - Description: Check and control skew degree of the antenna
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.7`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.7`
    - Return value
        ① -90.0~90.0 – Degree (˚)

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.7 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.7`
    - Setting value: `X`
        ① -90.0~90.00 – Degree (˚)

8. Elevation
    - Description: Check and control elevation of the antenna
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.8`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.8`
    - Return value
        ① -10.0~90.0 – Degree (˚)

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.8 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.8`
    - Setting value: `X`
        ① -10.0~90.00 – Degree (˚)

9. Azimuth
    - Description: Check and control azimuth of the antenna
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.9`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.9`
    - Return value
        ① 0.0~360.0 – Degree (˚)

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.9 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.9`
    - Setting value: `X`
        ① 0.0~360.00 – Degree (˚)

10. Latitude

- Description: Control and check the latitude of the antenna. The default value is based on the received data of the GPS equipped with the antenna.
- Access Type: Get/Set
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.10`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.10`
- Return value
  ① -10.0~90.0 – Degree (˚)

2) Set

`snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.10 X`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.10`
- Setting value: `X`
  ① -10.0~90.00 – Degree (˚)

11. Longitude

- Description: Control and check the Longitude of the antenna. The default value is based on the received data of the GPS equipped with the antenna.
- Access Type: Get/Set
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.11`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.11`
- Return value
  ① 0.0~360.0 – Degree (˚)

2) Set

`snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.11 X`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.11`
- Setting value: `X`
  ① 0.0~360.00 – Degree (˚)

12. Heading

- Description: Control and check the heading value of the vessel.
- Access Type: Get/Set
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.12`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.12`
- Return value
  ① 0.0~360.0 – Degree (˚)

2) Set

`snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.12 X`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.12`
- Setting value: `X`
  ① 0.0~360.00 – Degree (˚)

13. Antenna Power
    - Description: Control and check the antenna power.
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.13`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.13`
    - Return value
        ① 0 – Antenna power off
        ② 1 – Antenna power on

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.13 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.13`
    - Setting value: `X`
        ① 0 – Antenna power off
        ② 1 – Antenna power on

14. BUC Power
    - Description: Control and check the BUC power.
    - Access Type: Get/Set
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.14`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.14`
    - Return value
        ① 0 – BUC power off
        ② 1 – BUC power on
    -

    2) Set

    `snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.14 X`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.14`
    - Setting value: `X`
        ① 0 – BUC power off
        ② 1 – BUC power on

15. NIM AGC
    - Description: Check the AGC value of the NIM equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.15`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.15`
    - Return value

      ① 0~6000

16. NIM Quality
    - Description: Check the quality value of the NIM equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.16`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.16`
    - Return value

      ① 0~6000

17. RSSD
    - Description: Check signal value of the RSSD equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.17`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.17`
    - Return value

      ① 0~6000

18. RSSD C/N
    - Description: Check the CN value of the RSSD equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.18`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.18`
    - Return value

      ① 0~6000

19. GPS Status
    - Description: Check the validity of the GPS equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.19`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.19`
    - Return value

        ① 0 – Unknown

        ② 1 – Valid

        ③ 2 – Not Valid

20. GPS Latitude
    - Description: Check the latitude of the GPS equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.20`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.20`
    - Return value

        ① -90.0~90.0 – Degree (˚)

21. GPS Longitude
    - Description: Check the longitude of the GPS equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.21`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.21`
    - Return value

        ① -180.0~180.0 – Degree (˚)

22. GPS Speed (Speed over ground, Knots)
    - Description: Check the speed over ground of the GPS equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.22`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.22`
    - Return value

      ① 0.0~10000.0

23. GPS Angle (True Course)
    - Description: Check the angle of the GPS equipped with the antenna.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.23`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.23`
    - Return value

      ① 0.0~10000.0

24. External GPS
    - Description: Checking the external GPS equipped with the ACU.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.24`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.24`
    - Return value

      ① 0 – Not used

      ② 1 - Used

25. External Searching Reference
    - Description: Check the searching mode from an external device.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.25`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.25`
    - Return value
        ① 0 – DVB AGC Threshold
        ② 1 – DVB C/N Threshold
        ③ 2 – DVB Carrier Lock
        ④ 3 – RSSD Threshold
        ① 4 – RSSD C/N Threshold
        ② 5 – External Lock

26. External Tracking Reference
    - Description: Check the tracking mode from an external device.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.26`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.26`
    - Return value
        ① 0 – DVB AGC Level
        ② 1 – DVB C/N Ratio
        ③ 2 – RSSD AGC Level
        ④ 3 – RSSD C/N Ratio

27. External Searching Threshold
    - Description: Check the threshold of the search mode from an external device.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.27`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.27`
    - Return value
        ① 0~1000

28. Satellite Channel ID

- Description: Select and check the channel ID in the antenna settings.
- Access Type: Get/Set
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.28`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.28`
- Return value
  ① 1~80

2) Set

`snmpset -c public -v 1 localhost .1.3.6.1.2.1.8800.1.28 X`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.28`
- Setting value: `X`
  ① 1~80

29. Satellite Name

- Description: Check the satellite name of the selected satellite channel.
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.29`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.29`
- Return value
  ① Text

30. Satellite Position
    - Description: Check the satellite position of the selected satellite channel.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.30`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.30`
    - Return value
        ① -90.0~90.0

31. Satellite Band
    - Description: Check the band type of the selected channel.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.30`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.30`
    - Return value
        ① 0 – C-Band
        ② 1 – X-Band
        ③ 2 – KU-Band
        ④ 3 – KA-Band

32. Satellite RX Polarity
    - Description: Check the rx polarity type of the selected satellite channel.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.30`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.30`
    - Return value
        ① 0 – Horizontal
        ② 1 – Vertical
        ③ 2 – LHCP
        ④ 3 – RHCP

33. Satellite TRX Polarity
    - Description: Check the trx polarity type of the selected satellite channel.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.34`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.34`
    - Return value
        ① 0 – Cross Pol
        ② 1 – Co Pol

34. Satellite Searching Reference
    - Description: Check the searching mode of the selected satellite channel.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.35`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.35`
    - Return value
        ① 0 – DVB AGC Threshold
        ② 1 – DVB C/N Threshold
        ③ 2 – DVB Carrier Lock
        ④ 3 – RSSD Threshold
        ⑤ 4 – RSSD C/N Threshold
        ⑥ 5 – External Lock

35. Satellite Tracking Reference
    - Description: Check the tracking mode of the selected satellite channel.
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.36`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.36`
    - Return value
        ① 0 – DVB AGC Level
        ② 1 – DVB C/N Ratio
        ③ 2 – RSSD AGC Level
        ④ 3 – RSSD C/N Ratio

36. Driving Status

- Description: Check the driving status of the antenna.
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.37`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.37`
- Return value
  - ① 0 – Stand by
  - ② 1 – Initial
  - ③ 2 – Search
  - ④ 3 – Track
  - ⑤ 4 – Search Fail
  - ⑥ 5 – Axis Control Mode
  - ⑦ 6 – Demo Mode
  - ⑧ 7 – Unwrap
  - ⑨ 8 – Axis Calibration Mode

37. Gyro Status

- Description: Check status of the Gyro equipped with the antenna.
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.38`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.38`
- Return value
  - ① 0 – Normal
  - ② 1 – Manual
  - ③ 2 – Gyro Free

38. Tilt

- Description: Check the tilt of the antenna. (C Series Only)
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.39`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.39`
- Return value

① 0.0~90.0 – Degree (˚)

39. Level

- Description: Check the level of the antenna. (C Series Only)
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.40`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.40`
- Return value

① 0.0~90.0 – Degree (˚)

40. Yaw

- Description: Check the yaw of the antenna. (C Series Only)
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.41`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.41`
- Return values

① 0.0~360.0 – Degree (˚)

41. Reference Bank
    - Description: Check the reference bank of the antenna. (C Series Only)
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.42`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.42`
    - Return value

        ① 0.0~360.0 – Degree (˚)

42. Reference Elevation
    - Description: Check the reference elevation of the antenna. (C Series Only)
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.43`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.43`
    - Return value

        ① 0.0~90.0 – Degree (˚)

43. Reference Azimuth
    - Description: Check the reference azimuth of the antenna. (C Series Only)
    - Access Type: Get
    - Value Type: OctetString

    1) Get

    `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.44`

    - Option: `-c public -v 1` or `-c public -v 2`
    - Agent: `192.168.1.3` (IP address or URL of target device.)
    - OID: `.1.3.6.1.2.1.8800.1.44`
    - Return values

        ① 0.0~360.0 – Degree (˚)

44. AHRS Roll

- Description: Check the AHRS roll of the antenna. (C Series Only)
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.45`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.45`
- Return value

① -90.0~90.0 – Degree (˚)

45. AHRS Pitch

- Description: Check the AHRS pitch of the antenna. (C Series Only)
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.46`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.46`
- Return value

① -90.0~90.0 – Degree (˚)

46. AHRS Yaw

- Description: Check the AHRS yaw of the antenna. (C Series Only)
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.47`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.47`
- Return values

① 0.0~360.0 – Degree (˚)

47. Reference Frequency Input

- Description: Check whether Reference Frequency is detected in LBand TX Input.

  Access Type: Get
- Value Type: OctetString

1) Get

   `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.48`

   - Option: `-c public -v 1` or `-c public -v 2`
   - Agent: `192.168.1.3` (IP address or URL of target device.)
   - OID: `.1.3.6.1.2.1.8800.1.48`
   - Return value

     ① 0 – None

     ② 1 – Detected

48. ACU Temperature

- Description: Check the temperature of the ACU
- Access Type: Get
- Value Type: OctetString

1) Get

   `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.49`

   - Option: `-c public -v 1` or `-c public -v 2`
   - Agent: `192.168.1.3` (IP address or URL of target device.)
   - OID: `.1.3.6.1.2.1.8800.1.49`
   - Return value

     ① -40.0~100.0 – Celsius (˚C)

49. PCU Temperature

- Description: Check the temperature of the PCU
- Access Type: Get
- Value Type: OctetString

1) Get

   `snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.50`

   - Option: `-c public -v 1` or `-c public -v 2`
   - Agent: `192.168.1.3` (IP address or URL of target device.)
   - OID: `.1.3.6.1.2.1.8800.1.50`
   - Return value

     ① -40.0~100.0 – Celsius (˚C)

50. ACU Current

- Description: Check the current of the ACU
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.51`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.51`
- Return value

① 0.0~100.0 – A

51. PCU Current

- Description: Check the current of the PCU
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.52`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.52`
- Return value

① 0.0~100.0 – A

52. ACU Serial Number

- Description: Check the serial number of the ACU
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.53`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.53`
- Return value

① Text

53. ACU Part Number

- Description: Check the part number of the ACU
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.54`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.54`
- Return value

① Text

54. Antenna Serial Number

- Description: Check the serial number of the Antenna
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.55`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.55`
- Return value

① Text

55. Function Code

- Description: Check the antenna function code. The code of the fundamental configuration of the antenna. Code table is not disclosed.
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.56`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.56`
- Return value

① 0x00~0xFF (1byte)

56. Error Code

- Description: Check the antenna error code. Code table is in the appendix.
- Access Type: Get
- Value Type: OctetString

1) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.57`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.57`
- Return value

① 0x00000000~0xFFFFFFFF (4byte)

57. BUC Output Power

- Description: Check the current output power (TX Power) of the BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

2) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.60`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.60`
- Return value

① -100~100 (dBm)

58. BUC Temperature

- Description: Check the current temperature of the BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

3) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.61`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.61`
- Return value

① -40.0~100.0 – Celsius (˚C)

59. BUC Supply Voltage

- Description: Check the voltage input to BUC from the power supply.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

4) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.62`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.62`
- Return value

① 0~48 (V)

60. BUC Attenuation

- Description: Check the attenuator value set in BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

5) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.63`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.63`
- Return value
  ① 0~15 (dB)

61. BUC TX On

- Description Check the TX On/Off setting status on the BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

6) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.64`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.64`
- Return value
  ① 0 – TX off
  ② 1 – TX on

62. BUC Fan On

- Description: Check the normal operation status of the BUC fan.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

7) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.65`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.65`
- Return value
  ① 0 – Fan off
  ② 1 – Fan on

63. BUC PLL Lock

- Description: Check the lock status of the BUC PLL.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

8) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.66`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.66`
- Return value
  ① 0 – Unlock
  ② 1 – Locked

64. BUC External Mute

- Description: Check the external mute status of the BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

9) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.67`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.67`
- Return value
  ① 0 – External mute off
  ② 1 – External mute on

65. BUC Over Power

- Description: Check the TX output error status of BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

10) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.68`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.68`
- Return value
  ① 0 – Normal
  ② 1 – Over power

66. BUC Over Temperature

- Description: Check the temperature error condition of the BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

11) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.69`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.69`
- Return value
  ① 0 – Normal
  ② 1 – Over Temperature

67. BUC Model Type

- Description: Check the mute status of BUC's TX from an external device.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

12) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.70`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.70`
- Return value
  ① 0 – Unknown
  ② 1 – Revgo1
  ③ 2 – Revgo2
  ④ 10 – NJRC1
  ⑤ 20 – XMW1

68. BUC Data In

- Description: Check the data reception status from BUC.
  (67. It is not valid when BUC Model Type is 0.)
- Access Type: Get
- Value Type: OctetString

13) Get

`snmpget -c public -v 1 192.168.1.3 .1.3.6.1.2.1.8800.1.71`

- Option: `-c public -v 1` or `-c public -v 2`
- Agent: `192.168.1.3` (IP address or URL of target device.)
- OID: `.1.3.6.1.2.1.8800.1.71`
- Return value
  ① 0 – Not received
  ② 1 – Received

Appendix.A | Error Code Table – C Series

Includes C4 and C5.

No.	Code	Description
0	0x00000000	No Error
1	0x00000001	Skew motor driver or Limit error
2	0x00000002	Tilt motor driver or Limit error
3	0x00000004	Level motor driver or Limit error
4	0x00000008	Yaw motor driver or Limit error
5	0x00000010	Skew encoder error
6	0x00000020	Tilt encoder error
7	0x00000040	Level encoder error
8	0x00000080	Yaw encoder error
9	0x00000100	Skew control error
10	0x00000200	Tilt control error
11	0x00000400	Level control error
12	0x00000800	Yaw control error
13	0x00001000	RF NIM module error (no data)
14	0x00002000	RF no signal (bad LNB or no power to LNB or cable issue)
15	0x00004000	LNB power supply voltage is out of range
16	0x00008000	LNB Tone control is wrong
17	0x00010000	GPS module error (no valid signal in 20min after power on)
18	0x00020000	FCC TX mute caused by out of tracking
19	0x00040000	Searching failure
20	0x00080000	Wrong searching parameter (bad satellite longitude)
21	0x00100000	Level angle over range
22	0x00200000	Tilt angle over range
23	0x00400000	No AHRS data from inertial sensor unit
24	0x00800000	No Sub IMU
25	0x01000000	Acceleration exceeds 0.5G limit
26	0x02000000	Reserved
27	0x04000000	Reserved
28	0x08000000	Reserved
29	0x10000000	Reserved
30	0x20000000	Reserved
31	0x40000000	Reserved
32	0x80000000	Reserved

Appendix.B | Error Code Table – M4M

Includes M4M.

No.	Code	Description
0	0x00000000	No Error
1	0x00000001	Skew motor driver or Limit error
2	0x00000002	Tilt motor driver or Limit error
3	0x00000004	Level motor driver or Limit error
4	0x00000008	Yaw motor driver or Limit error
5	0x00000010	Skew encoder error
6	0x00000020	Tilt encoder error
7	0x00000040	Level encoder error
8	0x00000080	Yaw encoder error
9	0x00000100	Skew control error
10	0x00000200	Tilt control error
11	0x00000400	Level control error
12	0x00000800	Yaw control error
13	0x00001000	RF NIM module error (no data)
14	0x00002000	RF no signal (bad LNB or no power to LNB or cable issue)
15	0x00004000	LNB power supply voltage is out of range
16	0x00008000	LNB Tone control is wrong
17	0x00010000	GPS module error (no valid signal in 20min after power on)
18	0x00020000	FCC TX mute caused by out of tracking
19	0x00040000	Searching failure
20	0x00080000	Wrong searching parameter (bad satellite longitude)
21	0x00100000	Level angle over range
22	0x00200000	Tilt angle over range
23	0x00400000	No AHRS data from inertial sensor unit
24	0x00800000	No Sub IMU
25	0x01000000	Acceleration exceeds 0.5G limit
26	0x02000000	Reserved
27	0x04000000	Reserved
28	0x08000000	Reserved
29	0x10000000	Reserved
30	0x20000000	Moisture level yellow warning
31	0x40000000	Moisture level red warning
32	0x80000000	Water detected-> shut down

Appendix.C | Error Code Table – MK Series

Includes MK4 and MK3M.

No.	Code	Description
0	0x00000000	No Error
1	0x00000001	Level driving error
2	0x00000002	Cross driving error
3	0x00000004	Yaw driving error
4	0x00000008	Cross encoder error
5	0x00000010	Yaw encoder error
6	0x00000020	Sensor cage home-index error
7	0x00000040	Yaw home-index error
8	0x00000080	Skew home-index error
9	0x00000100	IMU in error
10	0x00000200	GPS error
11	0x00000400	FCC miss control error
12	0x00000800	Searching fail
13	0x00001000	Wrong searching parameter (bad satellite longitude)
14	0x00002000	Reserved
15	0x00004000	Reserved
16	0x00008000	Reserved
17	0x00010000	RF-MRU => No detect
18	0x00020000	RF-LNB => No signal
19	0x00040000	RF => Out of LNB voltage
20	0x00080000	RF => Out of LNB tone
21	0x00100000	RF => Out of LNBH fault
22	0x00200000	RF Dual-Band Controller in Dual Mode
23	0x00400000	Reserved
24	0x00800000	Reserved
25	0x01000000	Reserved
26	0x02000000	Reserved
27	0x04000000	Reserved
28	0x08000000	Reserved
29	0x10000000	Reserved
30	0x20000000	Reserved
31	0x40000000	Reserved
32	0x80000000	Reserved

Appendix.D | Function Code Table – C Series

Check the model information of the product.

Code	Model	Code	Model
0x00	C3 KU	0x80	T3 KU
0x01	C4 KU	0x81	T4 KU
0x02	C5 KU	0x82	T5 KU
0x03	C6 KU	0x83	T6 KU
0x08	C3 KA	0x88	T3 KA
0x09	C4 KA	0x89	T4 KA
0x0A	C5 KA	0x8A	T5 KA
0x0B	C6 KA	0x8B	T6 KA

Appendix.E | Function Code Table – MK Series

Check the model information of the product.

Code	Model	Code	Model
0x00	MK4-Z4-0	0x40	MK3-Z4-0
0x01	MK4-Z4-1	0x41	MK3-Z4-1
0x02	MK4-Z4-2	0x42	MK3-Z4-2
0x03	MK4-Z4-3	0x43	MK3-Z4-3
0x04	MK4-Z6-0	0x44	MK3-Z6-0
0x05	MK4-Z6-1	0x45	MK3-Z6-1
0x06	MK4-Z6-2	0x46	MK3-Z6-2
0x07	MK4-Z6-3	0x47	MK3-Z6-3
0x08	MK4-Z7-0	0x48	MK3-Z7-0
0x09	MK4-Z7-1	0x49	MK3-Z7-1
0x0A	MK4-Z7-2	0x4A	MK3-Z7-2
0x0B	MK4-Z7-3	0x4B	MK3-Z7-3
0x0C	MK4-Z8-0	0x4C	MK3-Z8-0
0x0D	MK4-Z8-1	0x4D	MK3-Z8-1
0x0E	MK4-Z8-2	0x4E	MK3-Z8-2
0x0F	MK4-Z8-3	0x4F	MK3-Z8-3
0x10	MK4-Z10-0	0x50	MK3-Z10-0
0x11	MK4-Z10-1	0x51	MK3-Z10-1
0x12	MK4-Z10-2	0x52	MK3-Z10-2
0x13	MK4-Z10-3	0x53	MK3-Z10-3
0x14	MK4-Z12-0	0x54	MK3-Z12-0
0x15	MK4-Z12-1	0x55	MK3-Z12-1
0x16	MK4-Z12-2	0x56	MK3-Z12-2
0x17	MK4-Z12-3	0x57	MK3-Z12-3
0x18	MK4-Z15-0	0x58	MK3-Z15-0
0x19	MK4-Z15-1	0x59	MK3-Z15-1
0x1A	MK4-Z15-2	0x5A	MK3-Z15-2
0x1B	MK4-Z15-3	0x5B	MK3-Z15-3
0x1C	MK4-Z18-0	0x5C	MK3-Z18-0
0x1D	MK4-Z18-1	0x5D	MK3-Z18-1
0x1E	MK4-Z18-2	0x5E	MK3-Z18-2
0x1F	MK4-Z18-3	0x5F	MK3-Z18-3

Appendix.F | Definition of terms

ACU	Antenna Control Unit
PCU	Pedestal Control Unit
NIM	Network Interface Module (In this document, it means DVB.)
BUC	Block Up Converter
LNB	Low Noise Block Down Converter
AGC	Automatic Gain Control
RSSD	Received Signal Strength Detector