

## ANTENNA (ZLS002750) SPECIFICATIONS

### 1. Scope

This Product Specification covers the mechanical, electrical and environmental performances specification for ZLS002750.

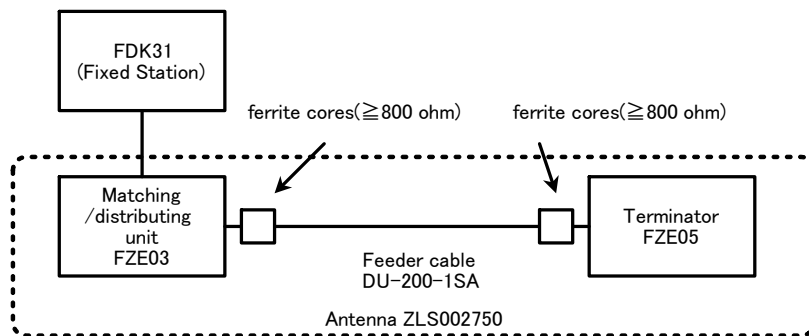
### 2. Product description

#### 2-1. Antenna model

Antenna model: ZLS002750

#### 2-2. Description

FDK31TU (fixed station) outputs its modulated signals to the 200-ohm feeder cables. Please note that a matching/distributing unit is necessary to attach 200-ohm feeder cables to this modem.



### 3. General specification

Product name	ZLS002750
frequency	151 - 156MHz, 230 - 235MHz, 302 - 322MHz
Operating with matching	-10°C~+50°C
Storage with matching	-20°C~+70°C
RF power	100mW
Impedance with matching	50 Ohms
Antenna type	Leaky Feeder Cable
Connector type	BNC
Single weight	approx. 630g

### 4. Antenna specification

#### 4-1. Electrical requirement

Frequency Range	151 - 156MHz	230 - 235MHz	302 - 322MHz
Peak Gain(max)	-30dBi max.	-30dBi max.	-30dBi max.
Average Total efficiency	>60%		
Return Loss	<10dB		

#### 4-2. Mechanical specification

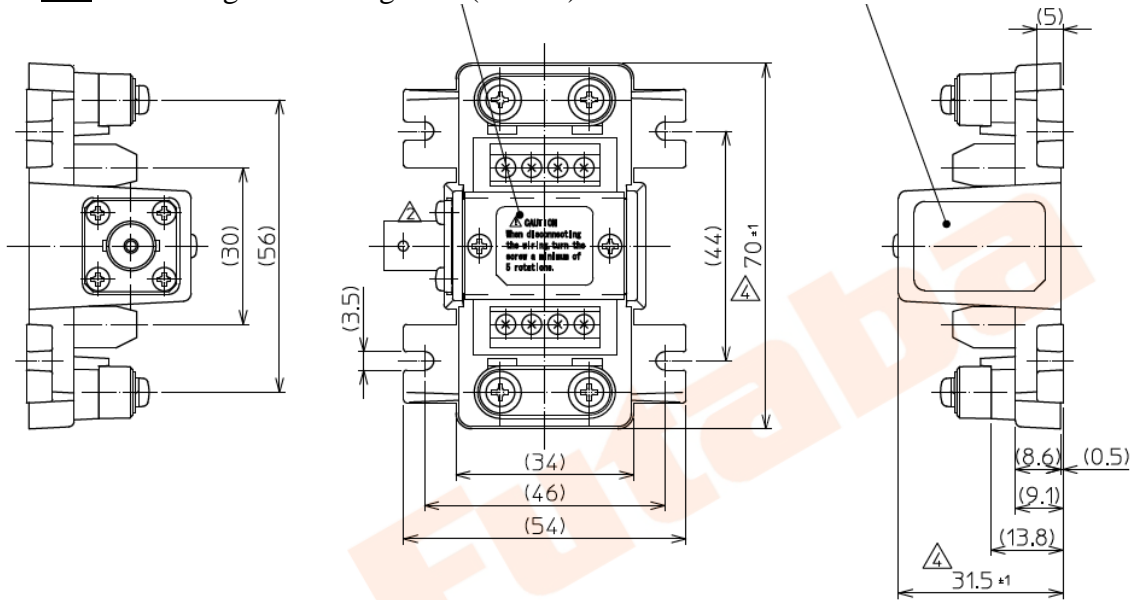
Minimum Bending Radius	60mm min.
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## 5. Environmental specification

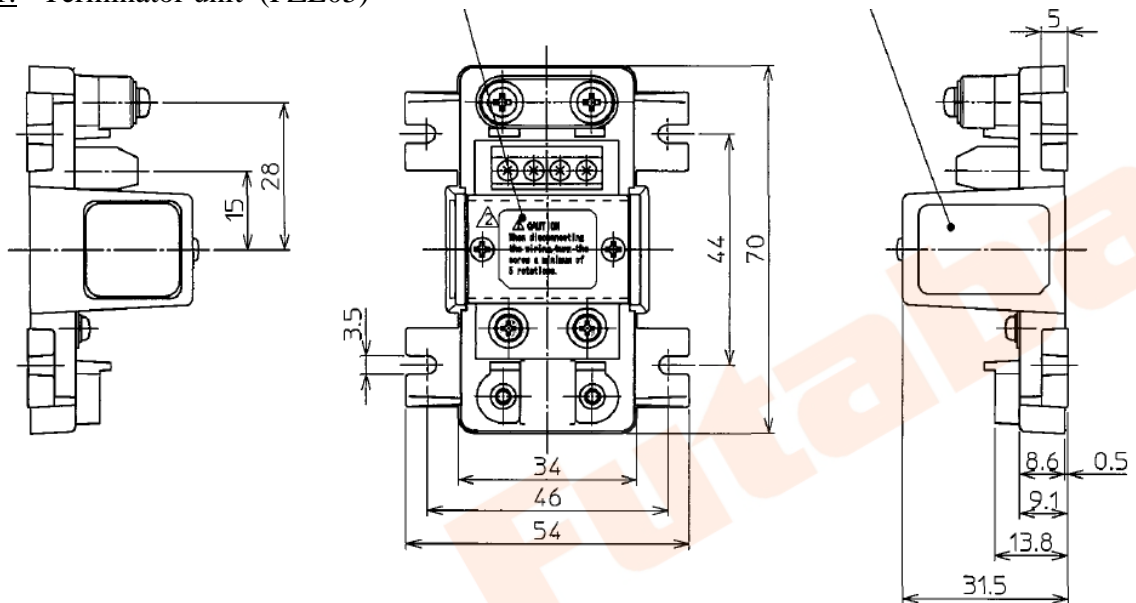
Description	Specification																																																
Temperature /Humidity cycling	<p>The following is one cycle and 10 cycles of the test shall be conducted.</p> <table border="1" data-bbox="655 488 1251 994"> <thead> <tr> <th></th> <th>Temperature</th> <th>Humidity</th> <th>time</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>+25°C→+50°C</td> <td>93%</td> <td>2.5h</td> </tr> <tr> <td>b</td> <td>+50°C</td> <td>93%</td> <td>3.0h</td> </tr> <tr> <td>c</td> <td>+50°C→+25°C</td> <td>80~96%</td> <td>2.5h</td> </tr> <tr> <td>d</td> <td>+25°C→+50°C</td> <td>93%</td> <td>2.5h</td> </tr> <tr> <td>e</td> <td>+50°C</td> <td>93%</td> <td>3.0h</td> </tr> <tr> <td>f</td> <td>+50°C→+25°C</td> <td>80~96%</td> <td>2.5h</td> </tr> <tr> <td>g</td> <td>+25°C</td> <td>93%</td> <td>1.0h</td> </tr> <tr> <td>h</td> <td>+25°C→-10°C</td> <td>—</td> <td>1.0h</td> </tr> <tr> <td>i</td> <td>-10°C</td> <td>—</td> <td>3.0h</td> </tr> <tr> <td>j</td> <td>-10°C→+25°C</td> <td>—</td> <td>1.5h</td> </tr> <tr> <td>k</td> <td>+25°C</td> <td>93%</td> <td>1.5h</td> </tr> </tbody> </table> <p>After the test, there should be no problem with the characteristics.</p>		Temperature	Humidity	time	a	+25°C→+50°C	93%	2.5h	b	+50°C	93%	3.0h	c	+50°C→+25°C	80~96%	2.5h	d	+25°C→+50°C	93%	2.5h	e	+50°C	93%	3.0h	f	+50°C→+25°C	80~96%	2.5h	g	+25°C	93%	1.0h	h	+25°C→-10°C	—	1.0h	i	-10°C	—	3.0h	j	-10°C→+25°C	—	1.5h	k	+25°C	93%	1.5h
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Temperature Shock	<p>The device under test at -20°C↔+70°C by 6 cycles, Dwell of 30 mins, transition time between Dwell 30 secs (~ 61 mins / cycle) and each item should be measured after exposing them in normal temperature and humidity for 1h.</p>																																																
High Temperature	<p>Temperature:+50°C, time:94 hours</p> <p>2. There is no substantial obstruction to air flow across and around the samples, and the samples are not touching each other</p> <p>3. Parts should meet RF spec before and after test.</p>																																																

## 6. Dimension

### 6-1. Matching/distributing Unit (FZE03)

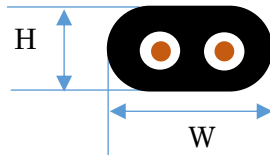


### 6-1. Terminator unit (FZE05)



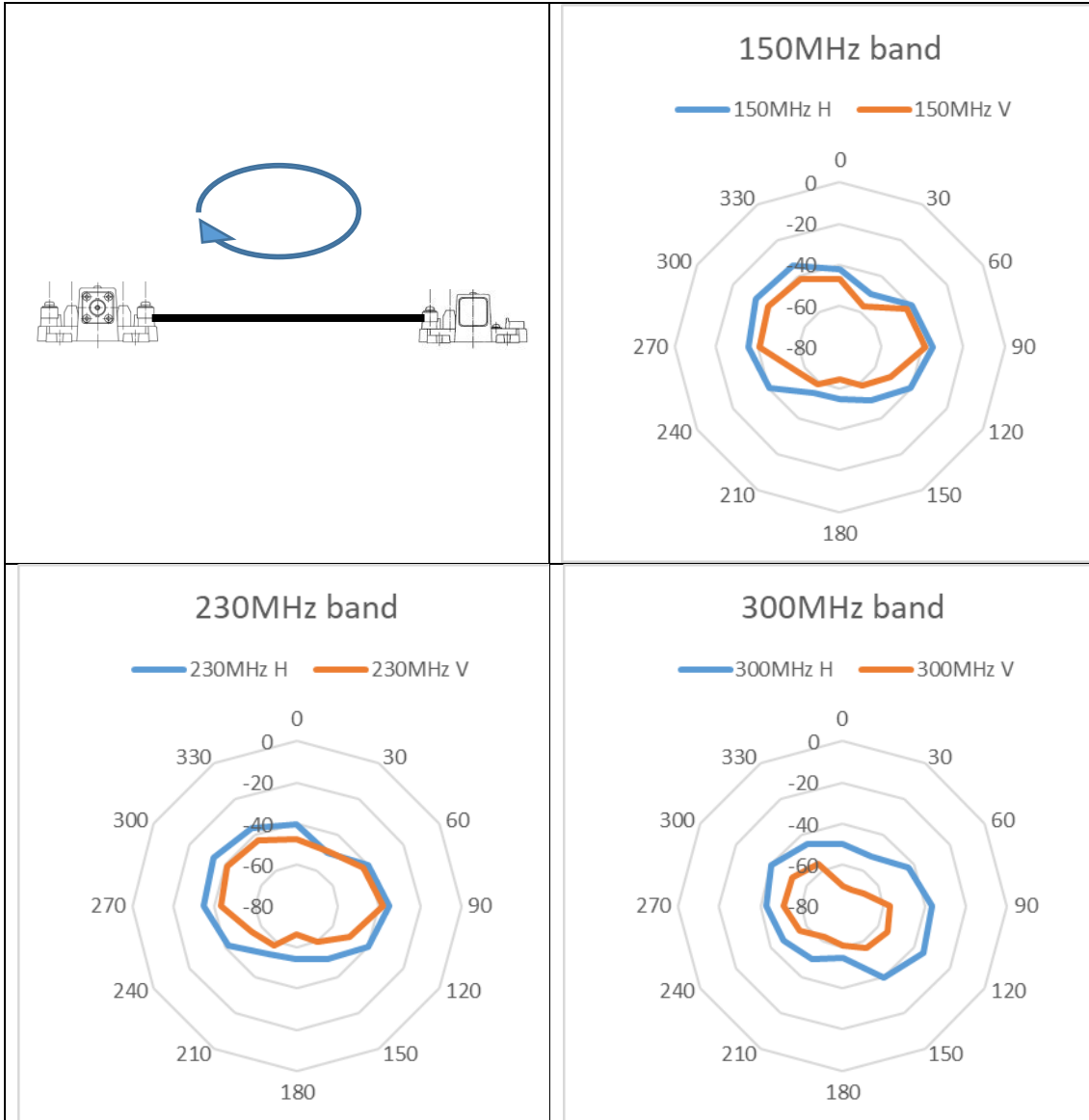
6-2. Feeder Cable DU-200-1SA

Outer dimensions: 5.0(H) x 9.2(W) mm



## 7. Radiation pattern

### 7-1. Pattern



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