

Inner Mongolia Jishuo Technology Co., Ltd

Specification of PH Rumen Capsule

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Content modification and supplement

Chen Weiqi

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1. summary

PH Rumen Capsule is a safe and environmentally friendly material designed to be composed of circuit boards, chips, sensors, batteries and other components. It is a cylindrical high-performance long-period biometric acquisition device. The ruminant health management system and management methods use the method of staying in the rumen to collect physiological data of ruminants, It enables the breeders to master the real-time physiological data of each animal in real time, and realize the abnormal reminder based on the data comparison function. It can control the health status of livestock in time, and manage the livestock with diseases and oestrus in time to avoid economic losses. Lora technology is used for communication, with ultra-low power consumption and a working life of 2 years

Product Functions

Real time oestrus monitoring Health status monitoring

Real time oestrus monitoring Abnormal status alarm

PH status monitoring

Typical applications

- ✓ Large scale and intensive monitoring and management for pasture
- Financial and insurance management (ruminant insurance business)
- ✓ Brand building of beef and milk enterprises
- ✓ Feed company (formula optimization)
- Veterinary medicine (disease prevention and control), veterinary medicine (specific medicine)
- Breeding Company (excellent breeding)
- Scientific research institutes (R&D)
- ✓ Government departments (market regulation and supervision)

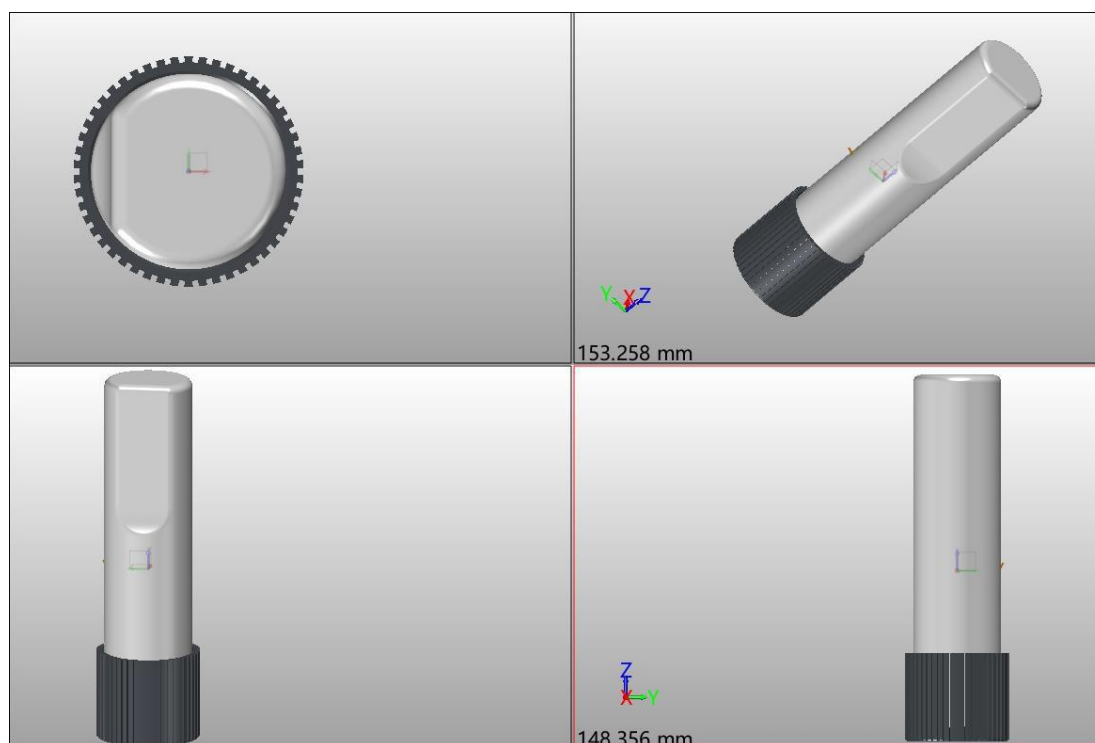
Model List of PH Rumen Capsule

S/N	desc
1 JS-0140	140*34mm

2. Product Description

- ✓ Real time collection and recording of accurate and reliable data in the stomach of cattle
- ✓ Fully traceable and comparable
- ✓ Detection of pH in the rumen of cattle
- ✓ Continuous body temperature measurement is not affected by external environment
- ✓ Special appearance design, easy Implantation and not rejection by rumen
- ✓ Special shell material ensures no corrosion and cracking in the rumen of cattle
- ✓ UV resistant, impact resistant

3. Product appearance



4. Technical specifications

proj	Specification	
Communication	LoRaWAN	
Frequency	902.3 Mhz ~914.9 Mhz	
LoRa output power	Type(SF9):15dBm@915MHz;15dBm@914.9MHz	
Communication distance	The farthest distance from the gateway after putting into rumen is 500 meters (without interference in open environment)	
Temperature sampling	+/-0.1 ° C monitoring rumen internal ambient temperature	
Accuracy Motion sensor dAata	Upload	Monitor rumen movement
Upload frequency	Set as required (12 minutes/15 minutes/)	
PH sampling	Indication accuracy+/- 0.2 Continuous repeated indication accuracy+/- 0.1 (180 days only)	
Average power	<33mW Static:<50uA Average: 160uAh	
Battery	3V 3000mAh	
Working time	2 years (The pH function is valid for 180 days, other functions such as temperature measurement and activity are valid for 2 years)	
Waterproofgrade	IP68	

5 Operating instructions

5.1 Storage requirements

Do not open the sealed bottle cap of the packaging bottle before Implantation storage at the temperature between - 40 ° C~22 ° C - 40 °



5.2 Implantation preparation

- 1) LORA gateway (prepare the corresponding quantity and plan the layout according to the range where the cattle are Implantation).
- 2) SIM card/network cable (prepare SIM card/cable according to the quantity of gateways).
- 3) Rumen capsules (prepare the requested quantity, and pH calibration before Implantation).
- 4) Capsule Dropper (at least 2).
- 5) Two ranch veterinarians perform implantation work.
- 6) The quantity of implanted cattle must be confirmed in advance. The implanted cattle should preferably be in the same cowshed for management purposes. The system account for the ranch must be created before Implantation.

5.3 Implantation rumen capsule

- 1) Equipment list: capsules, gateways, screwdrivers, capsule dropper, alcohol, disinfection appliances, disposable gloves, protective clothing, capsule registration form, pens (properly prepared).
- 2) Working team: 2 veterinarians and 1-2 recorders.
- 3) Installation the gateway according the layout.
- 4) Implantation process. Disinfect each capsule and the Capsule Dropper, avoid cross infection.
- 5) . Log in to the ranch administrator's account with your mobile phone, scan the capsule QR code and got the ID through APP, then add and save the corresponding cow ear tag, and make sure one cattle-one ear tag-one capsule.
- 6) Take a photo for the capsules and ear tag in the record, for Inspection in future.
- 7) Confirm the quality of capsules is consistent with the cattle, check the device options on the system status .

6. packing

Product	type	numb	size	Outer	Number	rema
Bovine rumen glue		1 device	Length 145 * diameter		36.9*33*18	
	Sealed bottle+equipment				30 sets/box	
JS-0140		/1 bottle	40 (MM)	.9cm		

7. contact us

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FCC Warning:❖

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.❖

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:❖

- (1) This device may not cause harmful interference, and❖
- (2) this device must accept any interference received, including interference that may cause undesired operation.❖

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:❖

- Reorient or relocate the receiving antenna.❖
- Increase the separation between the equipment and receiver.❖
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.❖
- Consult the dealer or an experienced radio/TV technician for help.❖

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

