

Field Remote Monitoring Product (Web-Based)





Manhole Station ALERT: A web-based flood warning system device.

PENTOUGH Manhole Station system detects rising water levels, and PATLITE device issues the alert.

The entire system is portable, no need for construction work, and can be easily installed and removed

Water levels will be detected every minute, and if it exceeds preset water level, an alarm will be issued to the safety manager and onsite staff working within the pipe.

Multiple monitoring units can be installed at various upstream locations, transmitting alerts to one central receiver.



Network Signal Tower + Rotating Beacon

Configuration: Network + Ground-level Signal Tower (three-color) + In-manhole Rotating Beacon

The ground-level three-color signal Tower lights up blue every 10 seconds to indicate normal status and yellow to signal a communication error, making it easy to confirm visually.

When the preset water level is exceeded, the ground-level three-color signal Tower turns red,accompanied by an audible alarm. At the same time, the rotating beacon inside the manhole signals with both light and sound to alert the working staff.



Specifications

1 Communication Device

●Modem: MVNO(3G/4G)、AU(CatM1)

Data Logger:

 $\label{lem:measurement} \begin{array}{ll} \text{Measurement Interval:} & 1,2,3,4,5,10,15,20,30,60\text{-minutes} \\ \text{Communication Interval:} & \text{Continuous intervals of 5,10,15,20,} \end{array}$

30,60-minutes , 2,3,4,6,8,12,24-hours

(Less than 5-minutes: Optional)

●Power Supply: 20AH Battery

2Dedicated Antenna

◆Dipole Antenna: 4G/3G/2G LTE
 ◆Cable: RG-174×2m
 ◆Connector: SMA (M) (with cable)

●Ingress Protection:: IP65

●Size: 72×53mm×H 143mm

3Water level transmitter

• Cable: With vent tube, ϕ 6 x standard 10m

(Covering material PUR)

●Option: Explosion-proof type and Corrosion-

resistant type

 $\frak{\mathcal{K}}$ Communication and server management fees are additional

PATLITE.



Specifications

●Size: H270 × W88 × D161

(NHV4: Φ40 NHV6: Φ60)

◆Rated Voltage: AC Adapter Input AC 100-240V,

Output DC 24V

●Power Consumption: 3.5W (standby), 9W (maximum sound

pressure at three-level lighting).

●Ingress Protection: IP20 ●Ambient Temperature: 0°C~40°C

Sound Pressure (dB): 88 (Adjustable volume)
 Input /Output: 4 inputs (voltage-free NPN),

2 outputs (voltage-free relay DC30V3A)

◆Mass: 1.03kg maximum

 $(\mathsf{LTE}\text{-}\mathsf{USB}\ \mathsf{dongle}\ \mathsf{not}\ \mathsf{included})$

●Modem: LTE USB dongle by Fujisoft Inc.

(+F FS0401 nano)

%Communication fee is additional



Specifications

●Size: Ф 100 H146

Rated Voltage: AC100-240V

●Power Consumption: 8.8W

Ingress Protection: IP66

•Ambient Temperature: $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$

● Mounting Direction: Indoor: Upright, Horizontal, Inverted;

Outdoor: Upright

●Wiring: Push-in terminal block
●Mounting: 2-point hole mounting

●Buzzer: 88dB

●Luminous Color: Red (22 selectable light patterns)

●Mass: 0.43kg