

**HAPPY**  
**MONITORING**



“Feel safe with the innovative system **Happy Monitoring**”

# HAPPY MONITORING

HAPPY MONITORING represents the most modern and innovative solution dedicated to monitoring. Through the use of GNSS RTK it is possible to set up an cheap and dynamic system, easy to install and always at hand. The collected data can be accessed in real time from your personal area, where a practical interactive chart collects and summarises them.

## BENEFITS

### Plug & Play

HAPPY GEM-X1x and GEM-X2x are the first plug & play monitoring sensors. They can be put into operation by any employee within seconds. All you need is mobile internet and electricity.

### Cloud

All calculation processes are done online on our cloud servers and can be accessed via app and the web. You don't need any application programs on your computer.

### Precision

Thanks to the high RTK data rate in highest precision, unprecedented accuracies can be achieved with a VRS correction service capable of GNSS (RTCM3.x) or HAPPY BASE.

### Flexibility

HAPPY MONITORING can be operated with 230V mains power or with a 12V photovoltaic system, whereby the power consumption can be reduced to an absolute minimum.

## USER MANUAL

1 Connect the system

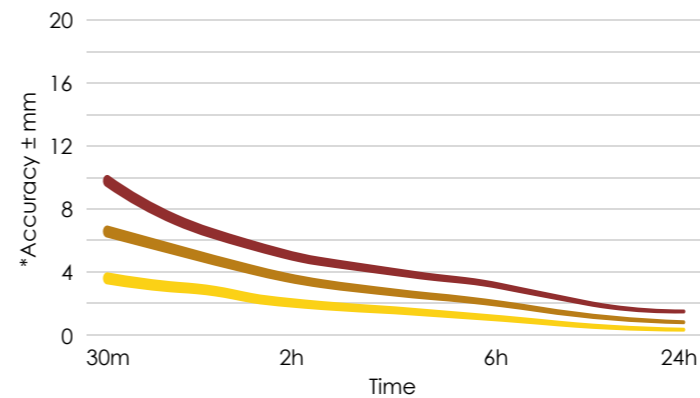
2 Displaying values online harvests

3 Be Happy!



## PRECISION

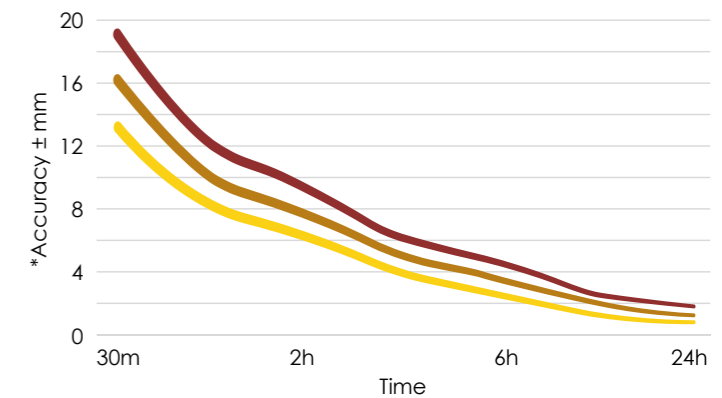
### Horizontal accuracy



● <500 m baseline ● <2500 m baseline ● <5000 m baseline

\*Accuracy in good conditions (at least 17 satellites on average in 24 hours)

### Vertical accuracy



● <500 m baseline ● <2500 m baseline ● <5000 m baseline

\*Accuracy in good conditions (at least 17 satellites on average in 24 hours)

# HAPPY GEM-X11

HAPPY GEM-X11 is the high-precision real-time monitoring system ideal for the most extreme weather conditions.



## PRODUCT DESCRIPTION

HAPPY GEM-X11 is the high precision real-time monitoring system ideal for the most extreme weather conditions.

It is equipped with multi-frequency receiver with integrated GPRS and can use corrections from VRS and HAPPY BASE for maximum accuracy.

## BENEFITS

- inclinometer (optional)
- weatherproof
- suitable for long-term monitoring
- plug & play
- cloud-based system
- 230V or photovoltaic panel

## TECHNICAL DATA

Horiz. accuracy:  $\pm 1,0$  mm / 24 hours \*  
Vert. accuracy:  $\pm 2,0$  mm / 24 hours \*  
Frequency: multi-frequency sensor (L1, L2, L5)  
GPS, GLO, GAL, BD (336 candli)  
Inclinometer: 3 integrated sensors (optional)

Weight: 1,9 kg  
Dimensions:  $\varnothing 190$  mm - h = 300 mm  
Power consumption: ca. 1 Amp  
Connectivity: integrated modem

\*The accuracy may vary depending on the environment, the duration of the measurement and the roofing. Data are given for medium to difficult conditions such as trees, horizon coverage or coverage due to individual buildings during 24 hours of measurement.





## HAPPY GEM-X20

HAPPY GEM-X20 is the lightweight and compact real-time monitoring system that can be installed in a minute, even in emergency situations.



### PRODUCT DESCRIPTION

HAPPY GEM-X20 is the lightweight and compact real-time monitoring system that can be installed in a minute.

It is equipped with multi-frequency receiver and external hotspot and can use corrections from VRS and HAPPY BASE for maximum accuracy.

### BENEFITS

- system height of only 10 cm
- complete system of only 1.4 kg
- suitable for emergency monitoring
- plug & play
- cloud-based system
- 230V or photovoltaic panels

### TECHNICAL DATA

Horiz. accuracy:	± 1,5 mm / 24 hours *
Vert. accuracy:	± 2,5 mm / 24 hours *
Frequency:	multi-frequency sensor (L1, L2, L5) GPS, GLO, GAL, BD (220 candli)
Inclinometer:	no

Weight:	1,4 kg
Dimensions:	ø 190 mm - h = 100 mm
Power consumption:	ca. 1 Amp
Connectivity:	external hotspot

\*The accuracy may vary depending on the environment, the duration of the measurement and the roofing. Data are given for medium to difficult conditions such as trees, horizon coverage or coverage due to individual buildings during 24 hours of measurement.

# HAPPY SURVEY



**Contact us :**



Company : South Instruments Technology Limited  
Address : Rm 6K, Blk 2, Kin Ho Ind. Bldg, 14-24 Au Pui Wan St., Shatin, N.T., Hong Kong  
Tel : (852) 9293 3993 Fax : (852) 3105 0141 Email : sales@southsurvey.com.hk



Company : YSF Corporation Ltd.  
Address : 5A, Blk 1, Kin Ho Ind. Bldg, 20-24 Au Pui Wan St., Fo Tan, Shatin, N.T., Hong Kong  
Tel : (852) 8109 8368 Fax : (852) 3007 4857 Email : sales@ysftool.com