RAPHAEL
BY TALIS

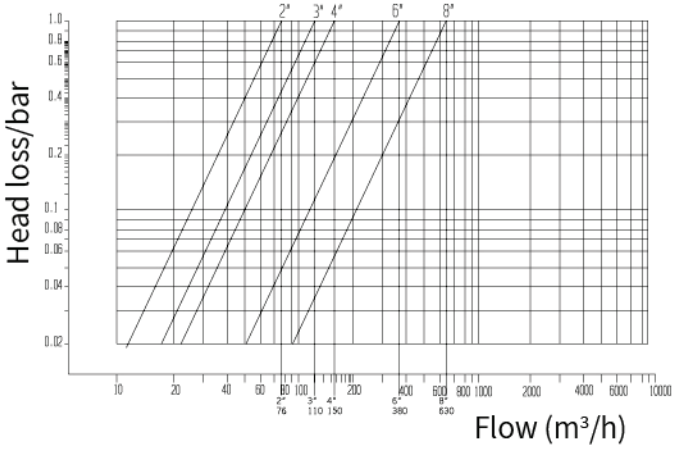
Ultraf PRO

Ultrasonic Hydrometer for Agriculture

Advantages

- Simple to install and operate.
- Single compact unit, space saving.
- No moving parts.
- Battery operated with extended battery life.
- Minimal maintenance.
- High level protection, according to IP68.
- Pressure control.
- Bluetooth App for field programing.
- Optional cards (digital and analog output).
- Low head loss.

Head Loss



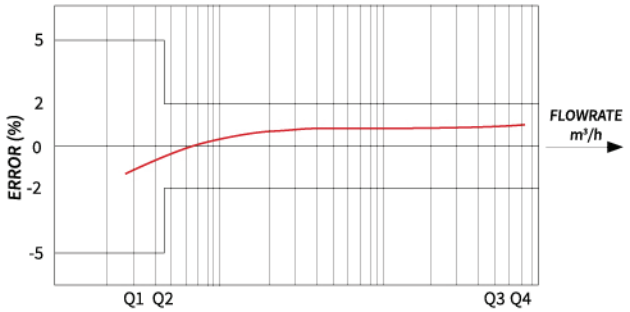
Product Performance

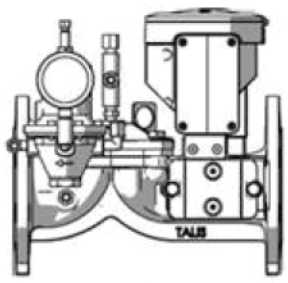
Flow	2	3	4	6	8
Q1	0.32	0.50	0.80	2.00	3.20
Q2	0.51	0.81	1.28	3.20	5.12
Q2 (1)	14.18	22.33	35.45	88.62	141.79
Q2 (2)	28.36	44.66	70.90	177.24	283.58
Q3	40	63	100	250	400
Q4	50	79	125	313	500
R	125	125	125	125	125

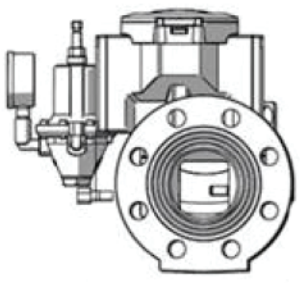
Dimensions & Weight

DN {mm}	50	80	100	150	200
DN {inch}	2	3	4	6	8
Length (mm)	260	300	350	500	600
Height (mm)	270	300	320	380	420
Width (mm)	190	223	240	320	370
Weight (kg)	10	15	23	44	67

Accuracy





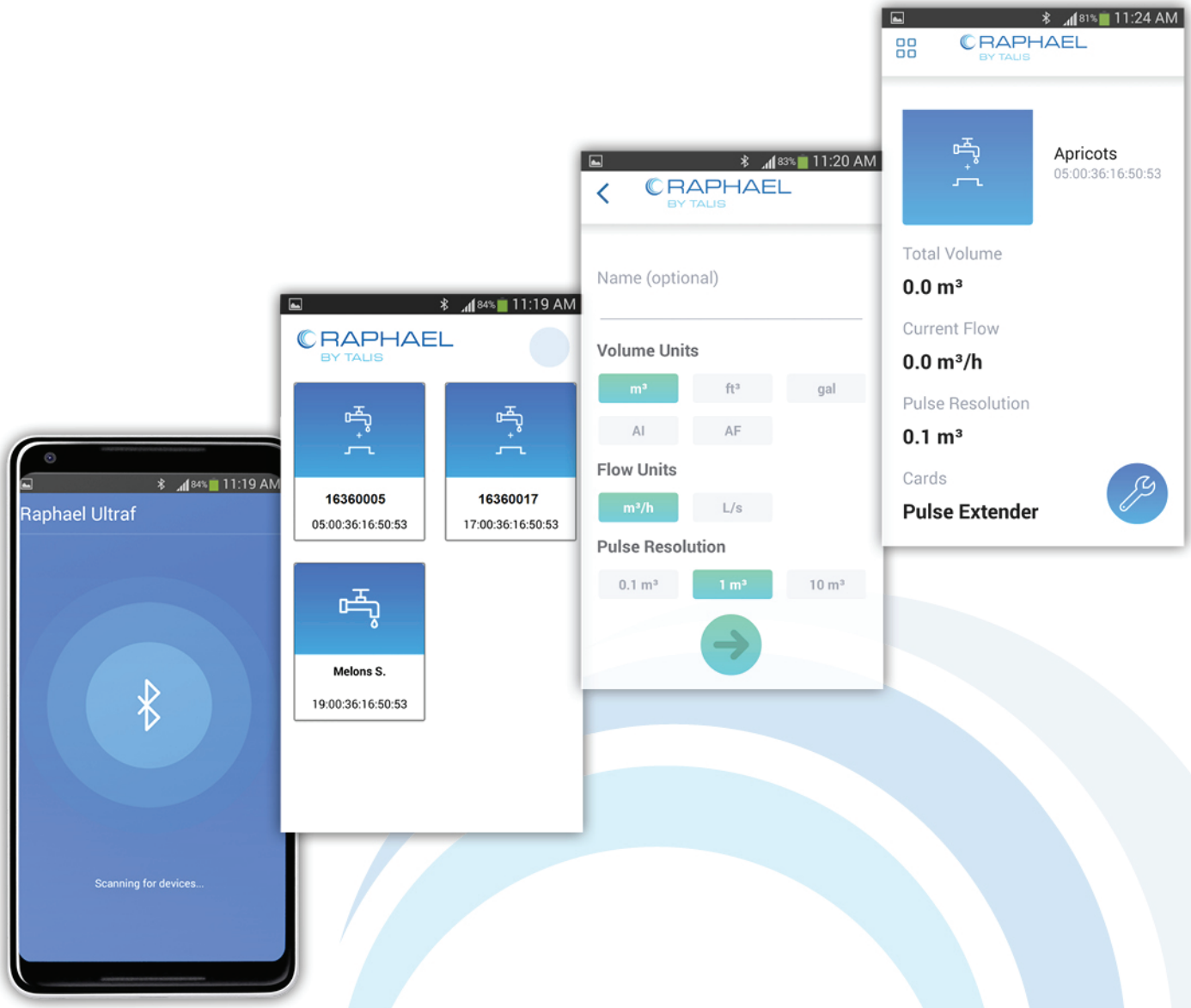


Features

A one of a kind ultrasonic hydrometer which combines in a single small unit: an ultrasonic water meter, a hydraulic valve, and a smart system for water measurement, pressure control and pressure management. Based on RAF series of diaphragm hydraulic valves, Ultraf is battery operated with no moving parts and no maintenance. Ultraf will save installation space and will maintain same accuracy over the years.

- Common uses:
  - Accurate pressure control.
  - Flow rate control.
  - Flow input to an external irrigation controller.
  - Independent, smart irrigation, hydrometer controller.

- Agricultural uses:
  - Field crops.
  - Orchards.
  - Pivot irrigation systems.
  - Pump systems.



Display

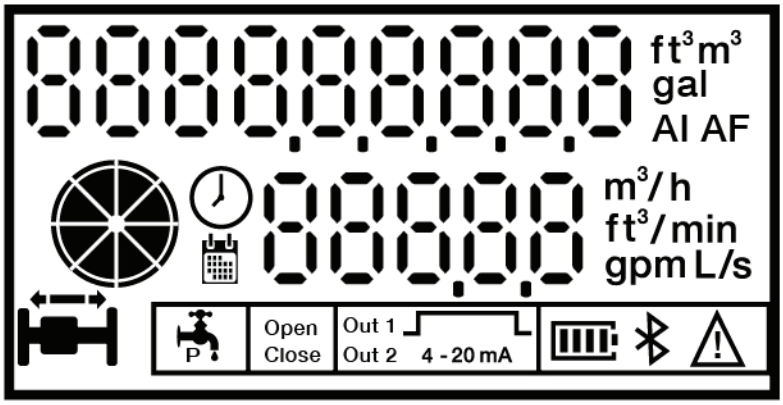
The display provides ongoing information to the operator in the field, at all times, by two main ways: digital display monitor and output cards. Cards can be added at any time.

- **Information on the digital display:**

- Water flow at any given moment.
- Accumulated water volume.
- Battery status.
- Flow in the pipeline (if pipe is full).
- Flow direction.
- Alerts.
- Connection status of electrical outputs from Ultraf Pro to external systems, and more.

- **Information about extension cards:**

- Two digital ports, one to register flow and one to activate a latching solenoid valve.
- A 4-20mA analog continues output for flow-rate monitoring.



Accumulated amount of water (in varying measurement units)

Flow rate (m3/h, ft3/min, gpmL/s)

Water status in pipe (full/partial/empty)

Flow direction

Latch solenoid status

Bluetooth connection

External output connection

Pulse output

Irrigation in progress

Active and supported irrigation

Battery status

General alert

Join the Modern Irrigation Revolution

Time for precise irrigation

- The perfect combination: ultrasonic water meter and hydraulic valve in one unit
- Water meter with maximum accuracy (less than 2% deviation)
- Long battery life with the possibility of battery replacement in the field
- Ultraf mobile application – digital water meter communicate via smartphone
- Easy and compact installation, low maintenance, no moving parts in the water

Raphael Industries Ltd. (1975) was founded in 1949 and is part of the international TALIS Group, a leader in water systems.
Raphael is one of the leading manufacturers of valves and control valves in Israel, thanks to it's wide range of advanced and world recognized products.
Raphael engineering department is engaged in producing the best and most advanced valves in the international market.
Raphael products are offered in more than 30 countries around the world for municipal water systems, chemical industry, food industries, air conditioning, irrigation, fire protection and more.

Raphael Industries Ltd.
Northern Industrial Zone
Or Akiva
30600
P.O.B. 555
Israel
Tel:972-4-6263555
Fax: 972-4-6263558
Email: export@raphael.co.il
Website: www.raphael-valves.com

RP-030E

TALIS

Note: Specifications may be changed without notification at any time.
Copyright: No copying without express written permission of TALIS.
TALIS and ERHARD are registered trademarks. 46228 EN (02/13)