INDEPENDENT CONTRACTOR AGREEMENT
Big Chino Sub-Basin Weather Station and SRP Flowtography™ Sites
City of Prescott Contract No. 2014-001A2

This Independent Contractor Agreement (hereinafter "Agreement") is made between *City of Prescott* with its principal address at 201 South Cortez Street, Prescott, Yavapai County, Arizona (the "Client") and the **SALT RIVER VALLEY WATER USERS ASSOCIATION** (the "Association").

RECITALS

A. The Association, as an agent of the Salt River Project Agricultural Improvement District, operates a water delivery system in central Arizona. The Association and the Client desire to add Weather and stream monitoring equipment within the Big Chino Sub-basin.

B. The Association agrees to perform these services for Client under the terms and conditions set forth in this Agreement.

In consideration of the matters described above, and of the mutual benefits and obligations set forth in this Agreement, SRP and Client agree as follows:

SCOPE OF WORK

Client engages the Association to furnish the work described in Schedule A, attached hereto and by this reference incorporated herein. The Association agrees to furnish the work in accordance with Schedule A. Client is responsible for obtaining all necessary permits, which may include land access agreements and/or permits necessary to install the monitoring equipment. All work done by the Association is warranted as noted in Schedule A.

PRICE AND PAYMENT

Client agrees to pay the Association in accordance with the price and payment terms set forth in Schedule A, sections V and VI, in accordance with Comprehensive Agreement No. 1 guidelines. The Association agrees to accept such amounts as full payment for its work and to sign such waivers of lien, affidavits and receipts as Client shall request in order to acknowledge payment.

MATERIAL, SUPPLIES, EQUIPMENT AND TOOLS

The Association shall supply, at its own expense, all materials, supplies, equipment and tools required to accomplish the work agreed to be performed in accordance with this Agreement.

INDEPENDENT CONTRACTOR RELATIONSHIP

The Association is an independent contractor and is not an employee, servant, agent, partner or joint venturer of Client. Client shall determine the work to be done by the Association, but the Association shall determine the means by which it accomplishes the work specified by Client. Client is not responsible for withholding, and shall not withhold, FICA or taxes of any kind from any payments which it owes the Association. Neither the Association nor its employees shall be entitled to receive any benefits which employees of Client are entitled to receive and shall not be entitled to worker's compensation, unemployment compensation, medical insurance, life insurance, paid vacations, paid holidays, pension, profit sharing, or Social Security on account of their work for Client.

EMPLOYEES OF CONTRACTOR

The Association shall be solely responsible for paying all FICA and other taxes, worker's compensation, unemployment compensation, medical insurance, life insurance, paid vacations, paid holidays, pension, profit sharing and other benefits for the Association and its employees, servants and agents.

INSURANCE

The Association is self-insured.

NON-WAIVER

The failure of either party to this Agreement to exercise any of its rights under this Agreement at any time does not constitute a breach of this Agreement and shall not be deemed to be a waiver of such rights or a waiver of any subsequent breach.

NO AUTHORITY TO BIND CLIENT

Neither the Association nor Client has authority to enter into contracts on behalf of, or authority to bind the other party.

NOTICES

Any notice given in connection with this Agreement shall be given in writing and delivered either by hand to the party, by certified mail, return receipt requested or by facsimile in accordance with Comprehensive Agreement no. 1.

ENTIRE AGREEMENT

This is the entire Agreement between the parties and can only be supplemented, amended or revised by a writing that is signed by each of the parties.

ASSIGNMENT

The Association may not assign any of its rights or duties under this Agreement without the prior written consent of Client.

TERM

This Agreement is effective as of the date signed by both parties and shall continue in effect until cancelled by either party upon ten (10) days written notice to the other party. In the event Client cancels, Client shall reimburse the Association for expenses incurred to date of cancellation notice.

LAW

This Agreement shall be governed and construed in accordance with Arizona law and venue shall be in Maricopa County.

The parties have executed this Agreement this 9th day of June, 2015

CLIENT- CITY OF PRESCOTT	THE SALT RIVER VALLEY WATER USERS' ASSOCIATION
By _____	By _____
MARLIN D. KUYKENDALL	
Its: Mayor	Its: Manager, Water Management, SRP

Photo Credit: SRP, June 2014-SRP Flowtography™ Station @ Williamson Valley Wash- XU

Proposal for 1 Weather Station with SRP Snowtography and 3 SRP Flowtography™ Stations (Capital and O&M costs included)

May 6, 2015

Lee W. Ester and Hector Buenrostro
Salt River Project

Table of Contents

I. Introduction

SRP is providing the following proposal for the deployment of one weather station equipped with SRP Snowtography and three SRP Flowtography™ stations.

Proposed Monitoring Location Coordinates

The following table outlines the coordinates of the proposed monitoring locations. These locations can also been seen on the Map of Existing and Proposed Flowtography Sites on the following page.

Table 1. Proposed Weather and Flowtography stations within the Big Chino Sub-basin

Proposed Site	Site Name	Latitude	Longitude
Proposed Weather Station	George Wood Canyon	34° 56' 21.9"	112° 56' 46.23"
Flowtography (Proposed Site #1 on map)	Big Chino at End of Prescott Property	35° 3' 6.76"	112° 41' 10.52"
Flowtography (Proposed Site #2 on map)	Big Chino-Walnut Confluence	34° 58' 2.92"	112° 34' 54.44"
Flowtography (Proposed Site #3 on map)	Sullivan Lake Dam	34° 51' 50.21"	112° 27' 37.17"

Map of Existing and Proposed Flowtography Sites

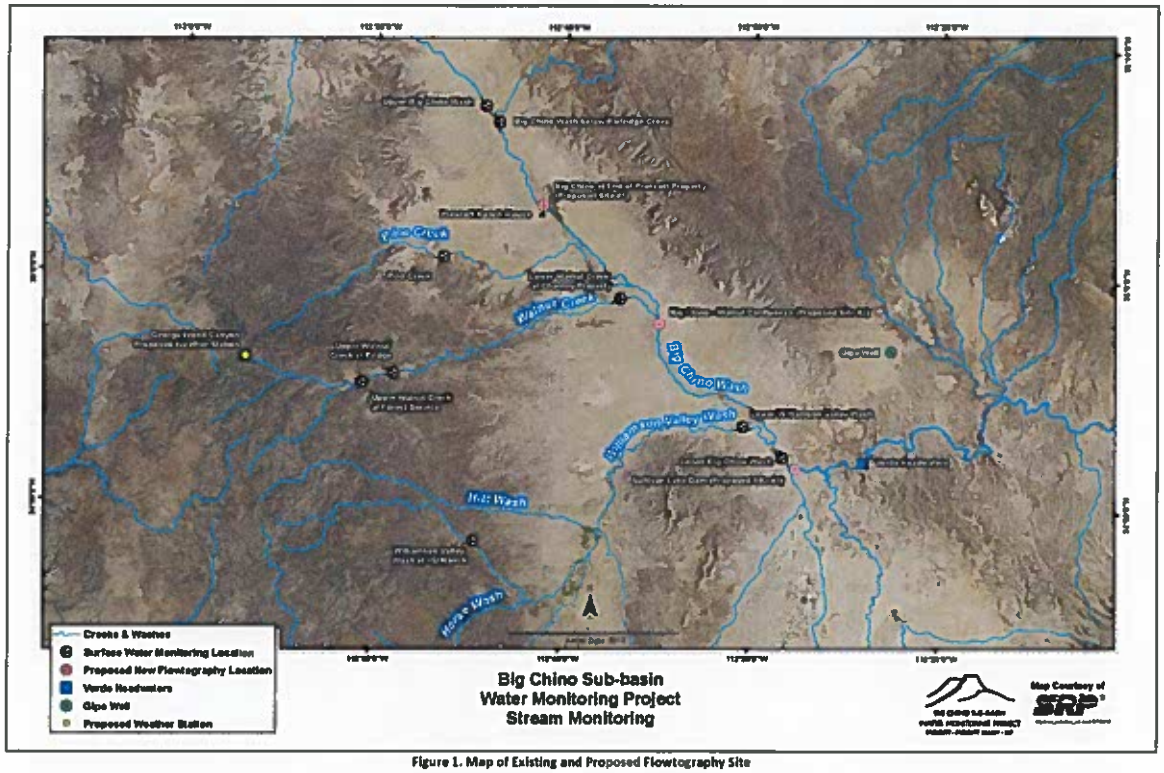

Figure 1. Map of Existing and Proposed Flowtography Site

II. Weather Station with SRP Snowtography

A request was made by the Big Chino Monitoring Committee to install a weather station and Snowtography in the Juniper Mountains near George Wood Canyon. Preliminary site coordinates of N 34° 56'41.84", W 112°56'1.84" were provided. The location was field investigated and alternate site coordinates N 34°56'21.9", W 112°56'46.23" determined to be more ideal (See Appendix for aerial map and photo image of site).

An SRP Snowtography station will collect images and transmit those images via cellular network. These images record snow activity at the weather station as well as when and how the snow is melting. The location will be at the George Wood Canyon Weather Station (see Figure 1 for site location on map and Table 1 for site coordinates).

Weather Station

The site will be equipped with a model WXT520 Vaisala Weather Transmitter, data logger, satellite transmitter, mounting pole and hardware, and would be solar powered. The Vaisala Weather Transmitter provides the following information: barometric pressure, humidity, precipitation, temperature, and wind speed (see Appendix for manufacturer specification sheet).

SRP Snowtography at the Weather Station

This site will be equipped with a camera and cellular modem, mounting pole, enclosures and hardware, and will be solar powered.

IV. SRP Flowtography™ Stations

SRP Flowtography™ stations will collect images of the stream channel only and transmit those images via cellular network. These images will gather information important in understanding the characteristics of the streams during flow events.

The proposed sites (see Figure 1 for site location on map and Table 1 for site coordinates) will be equipped with a camera and cellular modem, mounting pole, enclosures and hardware, and will be solar powered. Note: These sites will only be configured for image capture. Stream flow monitoring equipment is not included in this proposal

V. Project Cost Estimates

Capital Costs

The capital cost for the proposed one weather station with SRP Snowtography and three SRP Flowtography™ stations are outlined in Table 2 below. This cost includes all materials, transportation, and installation of equipment.

All permitting requirements related to the installations are the responsibility of the Big Chino Monitoring Committee.

Table 2 – Capital Costs

Capital Costs			
Site Type	Qty	Estimated Capital Cost	Total
Weather Station	1	$12,600 **	$12,600**
Addition of Snowtography to Weather Station (with event gage)	1	$9,950**	$9,950**
SRP FLOWTOGRAPHY™ site – no event monitoring	3	$ 9,800/site**	$29,400**
		Total Capital Costs	**$51,950****

****applicable taxes, if any, not included in this price**

Operation and Maintenance (O&M) – Recurring Cost Estimates

The SRP O&M budget will be used to travel, operate and maintain the sites, gather measurements and data from the devices, and manage the data analysis and processing.

To meet the above deliverables, SRP estimates the annual per site costs in Table 3. *This price does not include taxes, if applicable.* The actual services provided could vary due to weather, travel methods, site complexity, site access issues, and break fix events.

The sum of the site's annual maintenance budget, which is additional to the previously installed sites (City of Prescott Contract No. 2014-001) and exclusive to this proposal is outlined in Table 3 below.

Table 3 - O&M Costs

Annual Maintenance Budget			
Site Type	Qty	Estimated O&M Cost	Total
Weather Station with Snowtography	1	$4,900* / year / station	$4,900**
SRP FLOWTOGRAPHY™ site – no event monitoring	3	$ 3,500 / year / site	$10,500**
Cellular Fees 1 – SRP Snowtography sites 3 - SRP FLOWTOGRAPHY™ sites	4	$540 / year (estimated recurring annual cost/site)	$2,160**
Satellite fees for Weather Station	1	$1000 / year (estimated recurring annual costs)	$1,000**
		Total Estimated Annual O&M Costs	**$18,560****

****applicable taxes, if any, not included in this price**

In the event of any unforeseen circumstances or equipment needs, the following breakdown of SRP costs could apply:

Transportation – Helicopter	*$ 500 per rotor hour (avg. depends on aircraft)*
Transportation – Vehicle - ground	*$ 5 per SRP labor hour*
Additional Materials	*Actual cost plus 15%*
Cellular Network Fees	*$ 45 per site per month*
Labor (Professional Services)	*$ 125 per hour*
Labor (non-technical if appropriate)	*$ 105 per hour*
Data Processing (Professional & Analytical Services)	*$ 145 per hour*
Overnight stay and meal expenses (when required)	*~ $ 166 per day/person*

VII. Invoicing

All invoices will be accompanied by a detailed description of equipment and/or services provided.

Capital – Initializing Sites

During the capital equipment implementation of the project, SRP will invoice in advance for 50% ($25,975) of the total estimate ($51,950). The funds will be used directly towards the purchase of equipment and preparing site infrastructure. The balance of the capital costs will be invoiced when the sites are completed.

Operation and Maintenance (O&M) – Recurring Charges

At such a time that the initial installations are complete and accepted by the Monitoring Committee, each site will enter into the O&M phase of the project. Invoicing for routine services will occur at regular intervals and will be submitted subsequent to service events.

Break-Fix Event (Exception to Planned Schedule)

In the event that any special services or equipment requirements are needed, these actions will be invoiced as they occur.

Special Call Out and Change Orders

Special call-out for pre/post-storm or other servicing (such as collecting data and photographs) will be charged as Break-Fix events.

All invoices will be accompanied with a detailed description of equipment or services provided by site, date, and purpose.

VIII. Notice to Proceed

This communication outlines SRP's proposal for the deployment of one weather station with SRP Snowtography and three SRP Flowtography™ stations. SRP will install, operate, and maintain the sites in support of the Big Chino Sub-basin Data Collection and Monitoring Plan.

SRP welcomes a collaborative approach to meeting the needs of the Big Chino Sub-basin Water Monitoring Program. Through open communication and participation, the Monitoring Committee (and other decision makers) is welcomed to join in the configuration of equipment, field installation efforts, and accompany on future service and monitoring trips to each site.

An Independent Contractor Agreement is being provided to the Monitoring Committee for review and signature for this second phase of Capital and O&M work (see attached document).

If the Monitoring Committee should have any questions or would like to discuss this project proposal in further detail, please contact:

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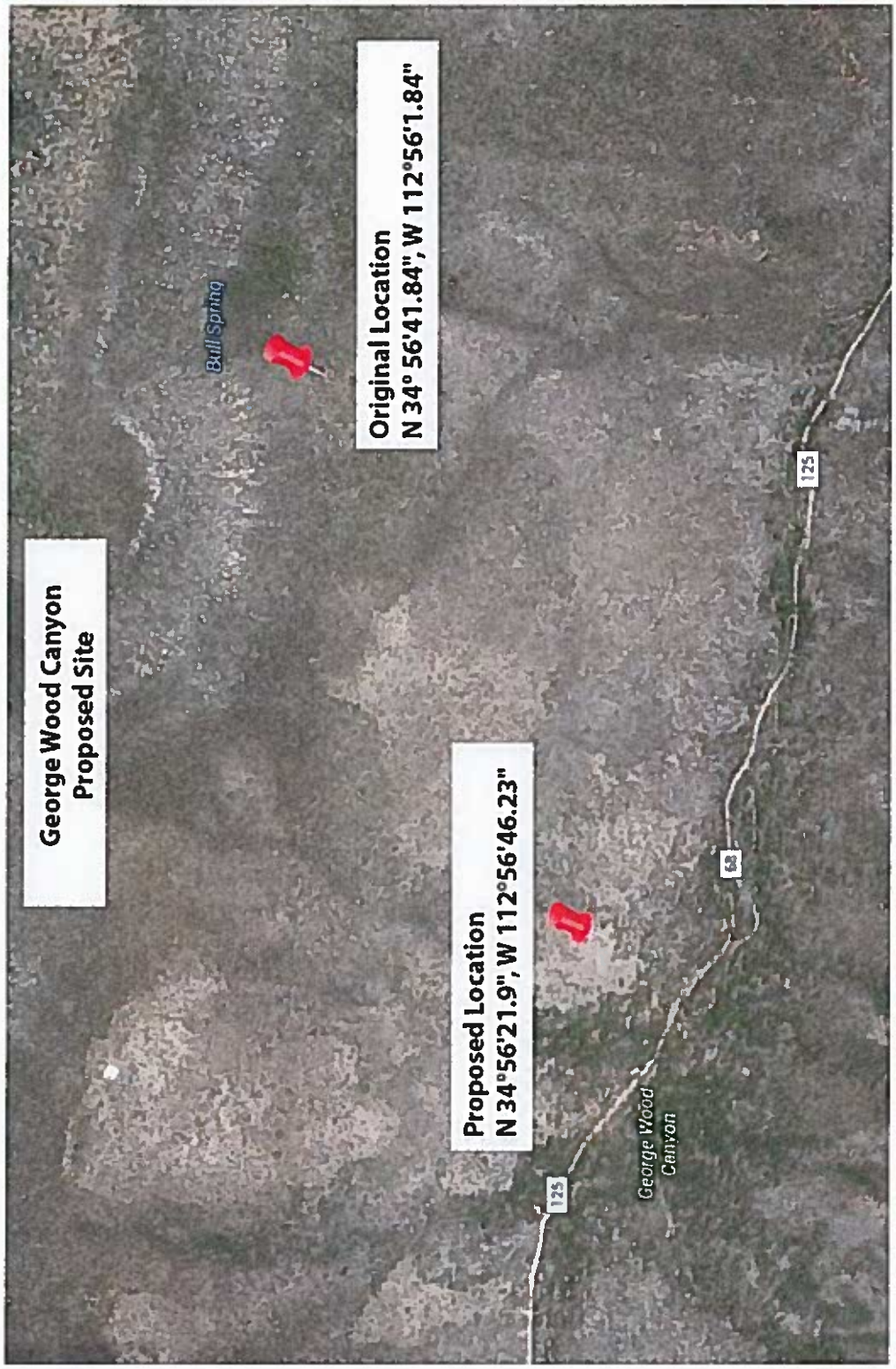
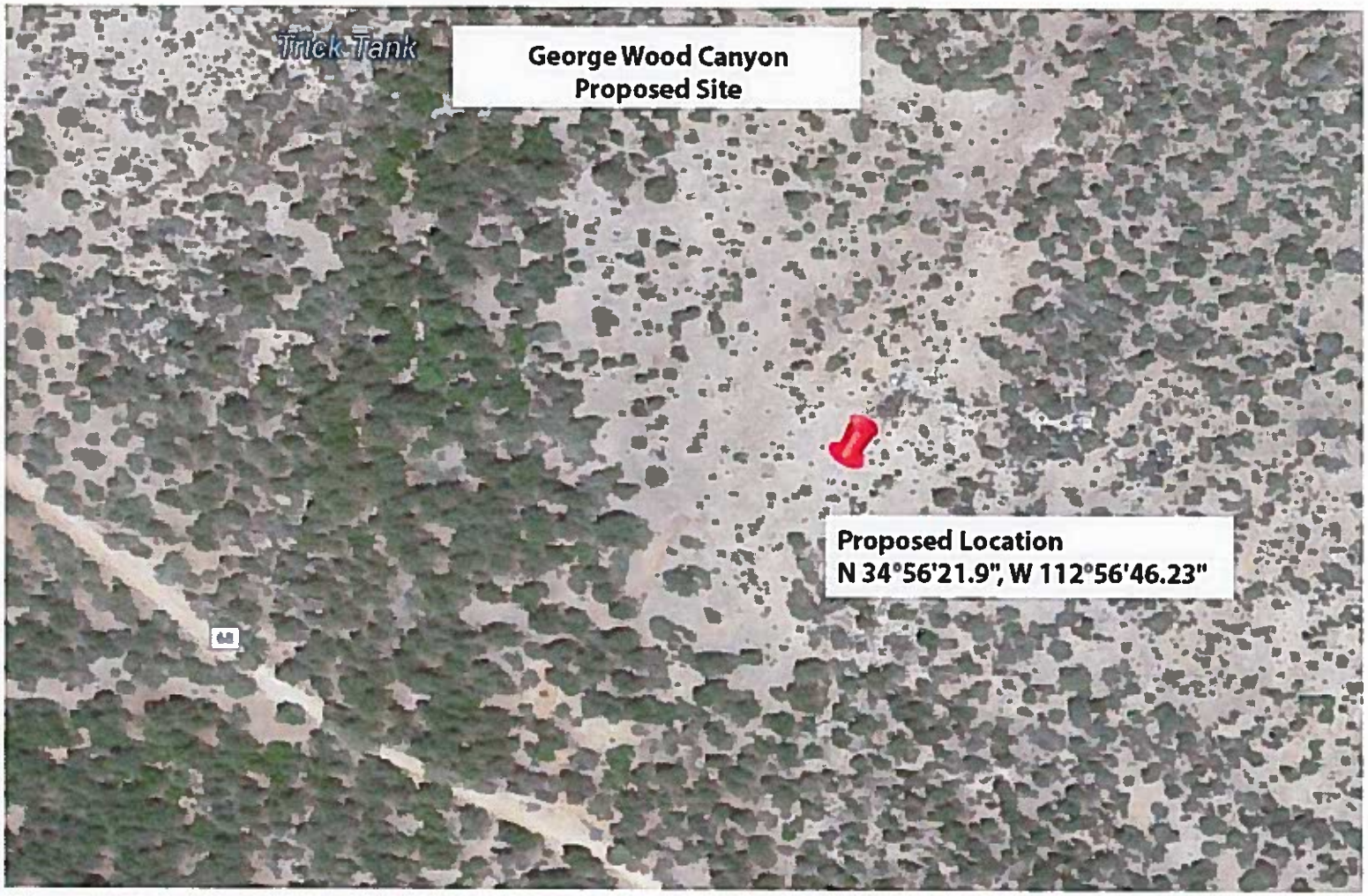
IX. Appendix

George Wood Canyon Weather Station

Vaisala Weather Transmitter

George Wood Canyon Weather Station




Trick Tank
George Wood Canyon
Proposed Site
Proposed Location
N 34°56'21.9", W 112°56'46.23"
3

George Wood Canyon
Proposed Site

Vaisala Weather Transmitter

VAISALA www.vaisala.com

Vaisala Weather Transmitter WXT520 Access to Real Time Weather Data

The WXT520 has an automatic control circuit that switches the heating on at low temperatures.

Features/Benefits

- Measures 6 most essential weather parameters
- Applications: weather stations, dense networks, harbors, marinas
- Low power consumption – works also with solar panels
- Compact, light-weight
- Easy to install with one-bolt mounting method
- No moving parts
- Heating available
- Vaisala Configuration Tool for pc
- USB connection
- IP66 housing with mounting kit

WXT520

The Vaisala Weather Transmitter WXT520 measures barometric pressure, humidity, precipitation, temperature, and wind speed and direction.

To measure wind speed and direction, the WXT520 has the Vaisala WINDCAP® Sensor that uses ultrasound to determine horizontal wind speed and direction. The array of three equally spaced transducers on a horizontal plane is a Vaisala specific design. Barometric pressure, temperature, and humidity measurements are combined in the PTU module using capacitive measurement for each parameter. It is easy to change the module without any contact with the sensors.

The WXT520 is immune to flooding clogging, wetting, and evaporation losses in the rain measurement.

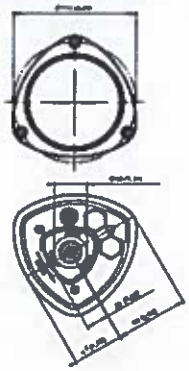
Measuring Acoustic Precipitation

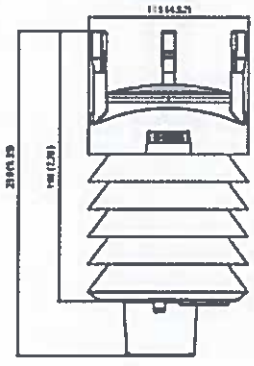
The WXT520 precipitation measurement is based on the unique Vaisala RAINCAP® Sensor, which detects the impact of individual rain drops. The signals exerting from the impacts are proportional to the volume of the drops. Hence, the signal from each drop can be converted directly to the accumulated rainfall.

The WXT520 measures accumulated rainfall, rain intensity and duration of the rain – all in real time.

Dimensions

Dimensions in mm (inches)





Technical Data

Wind

SPEED	
range	0 ... 60 m/s
response time	250 ms
accuracy	±3% at 10m/s
output resolutions and units	0.1 m/s, 0.1km/h, 0.1 mph, 0.1 knots
DIRECTION	
azimuth	0 ... 360°
response time	250 ms
accuracy	±3°
output resolution and unit	1°

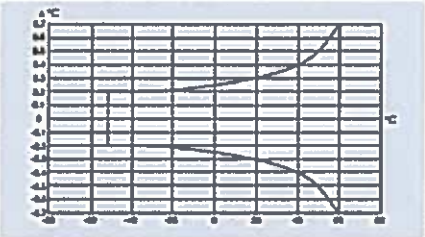
Liquid Precipitation

RAINFALL	cumulative accumulation after the latest automatic or manual reset
output resolutions and units	0.01 mm, 0.001 inches
accuracy	5%*
RAINFALL DURATION	counting each ten-second increment whenever water droplet is detected
output resolution and unit	10 s
RAIN INTENSITY	one-minute running average in ten-second steps
range	0 ... 200 mm/h (broader range with reduced accuracy)
output resolutions and units	0.1 mm/h, 0.01 inches/h
HAIL	cumulative amount of hits against the collecting surface
output resolutions and units	0.1 hits/cm², 0.01 hits/in², 1 hits
HAIL DURATION	counting each ten-second increment whenever hailstone is detected
output resolution and unit	10 s
HAIL INTENSITY	one-minute running average in ten-second steps
output resolutions and units	0.1 hits/cm²h, 1 hits/in²h, 1 hits/h

* Due to the nature of the phenomenon, deviations caused by spatial variations may exist in precipitation readings, especially in a short time scale. The accuracy specification does not include possible wind induced errors.

Air Temperature

Range	-52 ... +60 °C (-60 ... +140 °F)
Accuracy for sensor at +20 °C	±0.3 °C (±0.5 °F)
Accuracy over temperature range (see graph below)	



Output resolutions and units	0.1 °C, 0.1 °F

Barometric Pressure

Range	600 ... 1100 hPa
Accuracy	±0.5 hPa at 0 ... +30 °C (+32 ... +86 °F) ±1 hPa at -52 ... +60 °C (-60 ... +140 °F)
Output resolutions and units	0.1 hPa, 10 Pa, 0.0001 bar, 0.1 mmHg, 0.01 inHg

Relative Humidity

Range	0 ... 100 %RH
Accuracy	±3 %RH within 0 ... 90 %RH ±5 %RH within 90 ... 100 %RH
Output resolution and unit	0.1 %RH

General

Operating temperature	-52 ... +60 °C (-60 ... +140 °F)
Storage temperature	-60 ... +70 °C (-76 ... +158 °F)
Operating voltage	5 ... 32 VDC
Typical power consumption	3 mA at 12 VDC (with defaults)
Heating voltage	5 ... 32 VDC / 5 ... 30 VAC_{RMS})
Serial data interface	SDI-12, RS-232, RS-485, RS-422, USB connection.
Weight	650 g (1.43 lb)
Housing	IP65
Housing with mounting kit	IP66

Electromagnetic Compatibility

Complies with EMC standard EN61326-1, Industrial Environment	
IEC standards	IEC 60945/61000-4-2 ... 61000-4-6

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