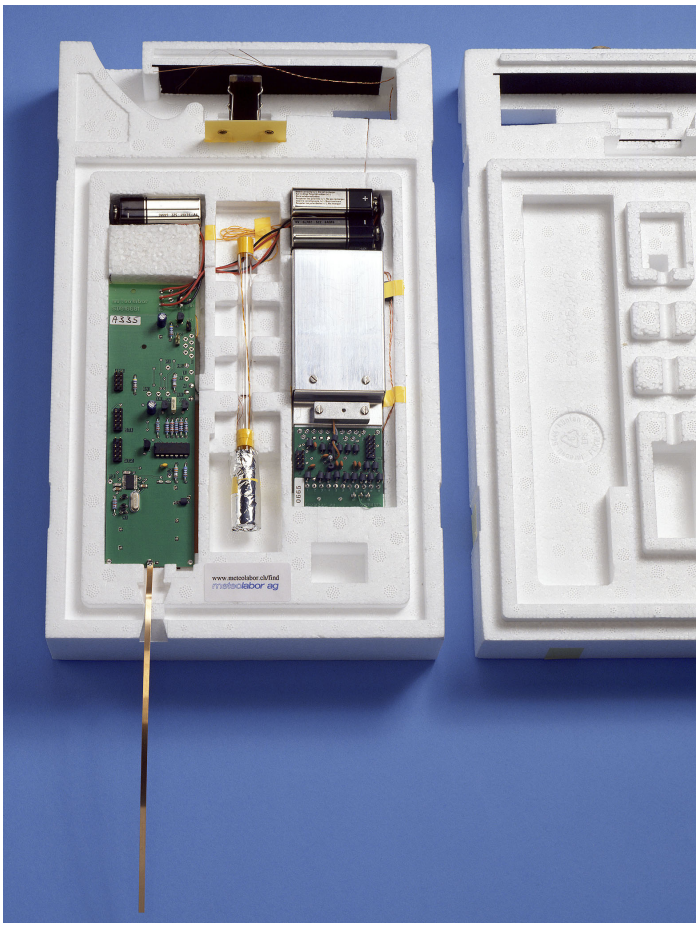
Radiosonde SRS-C34 Type 3

PTU-Sonde with SnowWhite® sensor und spare channel for ARGUS37



SRS-C34 Type 3

The Sonde SRS-C34 Type 3 contained a high-quality measuring unit with full-range water hypsometer, temperature sensor with small time constant, interface for humidity sensor Hygristor, SnowWhite® chilled mirror water vapour sensor as well as one spare channel (voltage).

The measuring unit has been specifically developed for meteorological research. It is supplied with a transponder for the ARGUS sounding system.

The measuring unit is fully configured and adjusted at ***meteolabor ag.*** This eliminates elaborate start preparations and calibration procedures. However the Hypsometer pressure measurement accuracy can be improved by a "Base Line Check".

The SRS C34 features a modular design. Thus various other types can be supplied:

Sensors: Hypsometer, thermocouple-thermometer, Hygristor, ozone sensor, SnowWhite®, GPS

Output: ASCII, binary, pulse modulation for secondary radar system, 403MHz FM narrow band crystal controlled synthesized transmitter.

Because of its unique measurement technique SRS-C34 does not need any individual sensor calibration and can easily be used again if recovered.

Data processing and data interface

The controller calculates the physical quantity from its current measured values and the coefficients stored in the controllers memory. The output is a serial string containing data, channel number and the checksum.

Hofstrasse 92
CH-8620 Wetzikon 1
Internet: www.meteolabor.ch

meteolabor ag

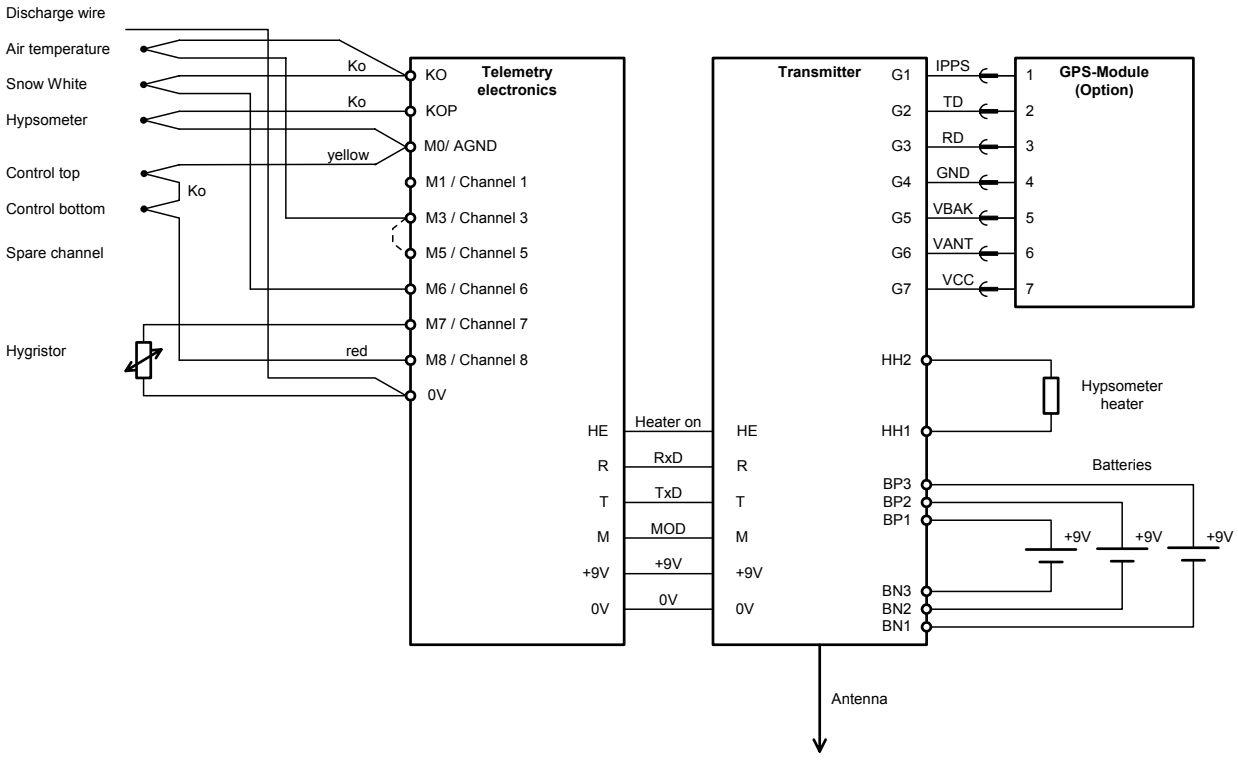
Tel. +41 44 934 40 40
Fax +41 44 934 40 99
E-Mail: sales@meteolabor.ch

Technical data

Measurement channels	Measured variable	Meas. range	Accuracy	Unit
Channel 0	Offset (internal used value)	-	-	-
Channel 1	Barometric pressure	5 ... 1100	0.2 %*)	hPa
Channel 2	Internal reference temperature	-10 ... + 50	±0.1	°C
Channel 3	Air temperature	-100 ... + 60	±0.1	°C
Channel 4	Span (internal used value)	-	-	-
Channel 5	Voltage	- 4 ... 1 x 10^3	1	µV
Channel 6	Snow White®	-100 ... + 50	±0.1	°C
Channel 7	Hygristor Voltage	- 4 ... 1 x 10^3	1	µV
Channel 8	Hypsometer heater (internal used value)			
Channel sequence	0, 1, 2, 3, 4, 5, 6, 7, 8			
Interface	Description		Setting	Unit
Type	AFSK		2900 / 4700	Hz
Baud rate	Transmission speed		2400	bps
Delay t_1	Time signal TELEM active until 1st start bit		2	ms
Delay t_2	Time of last stop bit until TELEM inactive		0	ms
TELEM level	Active level of TELEM signal		0	V
Synch characters	Synchronization of data transmission		2 / 255	
Baud rate GPS	Internal interface GPS to SRS-C34		4800	bps
Power supply	Description		Range	Unit
Supply source	9V battery 6LR61		8.5 ... 12	V
Power input	Without GPS module		ca. 175	mA
Hypsometer heater	With GPS module		ca. 230	mA

*) corresponding abt 20m geopotential accuracy

Block diagram



Physical dimensions

Measuring unit	143 x 50 x 25 mm	(l x b x d)
Snow White® Sensor	210 x 260 x 90 mm	(l x b x d)
Hypsometer	15 x 170	(D x l)

Ordering information

- Sonde without GPS, Day SW MRS-SRS-C34/000
- Sonde without GPS, Night SW MRS-SRS-C34/002
- Sonde incl. GPS, Day SW MRS-SRS-C34/003
- Sonde incl. GPS, Night SW MRS-SRS-C34/022

Hofstrasse 92
CH-8620 Wetzikon 1
Internet: www.meteolabor.ch

meteolabor ag

Tel. +41 44 934 40 40
Fax +41 44 934 40 99
E-Mail: sales@meteolabor.ch