



## GPRS Communication Unit 4043, 4143A, 4543A

*GPRS Communication Unit enables real-time data communication via the GSM network.*

*4043 is a device for systems containing Datalogger 3660/3634 only.*

*4143A is a device for systems containing an RDCP600, SEAGUARD® or similar equipment using RS-422 and Datalogger 3660/3634.*

*4543A is a device for systems containing RDCP600, SEAGUARD® or similar equipment using RS-422.*

General Packet Radio Service, GPRS, is an IP based platform designed to offer access to data networks. In GPRS communication, radio resources are used only when there is data information to transmit, even though the user remains logical connected all the time (always online).

GPRS communication system enables a network of meteorological and/or hydrological stations to be directly connected to your private corporate network. Data are routed using secured channels (VPN connection): from the field stations to your private network via your mobile network supplier. Contact your network supplier for details.

### **Cost-effective solution**

GPRS communication gives you a cost-effective real-time monitoring system. Using GPRS you pay for the data volume transmitted, hence for applications involving rather small amounts of information (like AADI meteorological and hydrological stations) the cost using GPRS can be significantly less than for data circuit switched alternatives (like e.g. GSM Data).

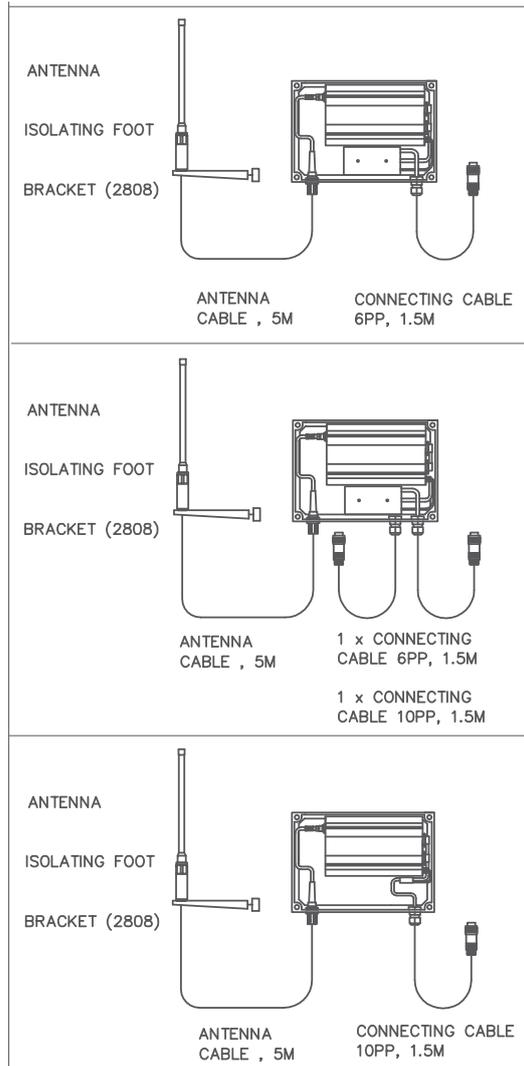
### **Equipment**

A computer with GeoView web based display program can be set up to receive and display data from stations anywhere in the world. A GPRS Server 4313 receives the data and enables communication channels to each station containing the GPRS Communication Unit. The system will act in the same way as if the stations were part of the local network that the GPRS Server is located in.

The GPRS Communication Unit consists of the Viola Arctic Gateway Modem, a GSM antenna, an isolating foot and bracket for mounting as well as cables towards the equipment it is intended for. For 4043 and 4143, the unit also contains an RS-232 interface needed for the 3660/3634.

The GPRS modem needs a SIM card prepared for GPRS communication to operate. The SIM card is NOT delivered together with the GPRS modem. Contact your mobile network supplier to obtain a SIM card for your application.

# Specifications 4043, 4143A, 4543A



## SIM CARD INSTALLATION

The GPRS modem requires a SIM card prepared for GPRS communication to operate. In order to log on automatically to the GPRS net, the automatic PIN code request must be disabled. The SIM card is NOT delivered together with the GPRS modem. Contact your network supplier to obtain a SIM card for your modem and install it as instructed below:

- 1 Remove the cover from the cabinet.
- 2 The SIM card slot is located on the side of the modem. Push the button with a pen to eject the tray for the SIM card. Insert the SIM card into the tray and insert into the modem.

## CONNECTION TO DATALOGGER 3660/3634

Connect the GPRS modem's right connector to the LAST READING connector on the Datalogger.

GPRS module: Viola Arctic 2260 GPRS Gateway  
 SIM card: 3V mini SIM cards enabled for GPRS. *Note! The SIM card should only be removed when power is disconnected*  
 Supply voltage: 10-36Vdc  
 Current consumption: @ 12V, Idle: 35mA, Transmitting: 200mA average Peak current 600mA  
 Operating temperature: -20 to +60°C  
 Physical connection: 6-pin waterproof plug 2828  
 Weight: 2.5kg  
 Dimensions: 255 x 180 x 60mm IP67 polycarbonate cabinet

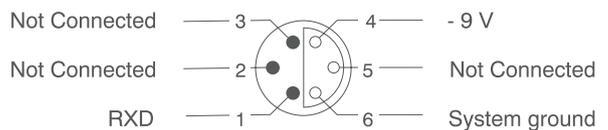
Accessories included:  
 4043 standard version: Cables for connection to 3660/3634  
 4143A version: Cables for connection to 3660/3634 and device with RS-422 output protocol  
 4543A version: Cables for connection to RS-422 output protocol

All versions: Mounting bracket with isolating foot, 5m RG58 antenna cable, dual-band omni-directional antenna

Accessories optional: High gain omni-directional or directional antenna

## PIN CONFIGURATION towards Datalogger 3660/3634

Receptacle, exterior view; pin = ●; bushing = ○



## CONNECTION TO SEAGUARD®/RDCP

For 4143, make a connection to the GPRS modem via 4738 junction box to the left connector on the modem.

**NOTE!** Aanderaa Data Instruments use positive system ground while the GPRS modem and antennas have negative ground. A special mounting bracket that isolates the antenna ground from the system ground must therefore be applied. This bracket is included in the GPRS Communication Unit 4043 and 4143. If the bracket is not used the GPRS modem can be damaged.



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