3G RMS enables existing and new OMUs to be efficiently connected to a Siemens RMS Instation using 3G, replacing GSM or older fixed telephone lines.

Simple on-site upgrade
The 3G upgrade solution for RMS enables users who wish to move from aging GSM links between their OMUs and RMS Instation to 3G, potentially reducing running costs and overcoming the gradual reduction of GSM services which is now occurring.

For existing GSM sites the upgrade simply requires individual Gemini 2 OMUs to be to the latest firmware, fitting a new 3G router and downloading a modified OMU configuration. The existing GSM antenna is usually able to be retained for 3G use.

Although the main use for this upgrade is likely to be existing GSM sites it is also possible to upgrade sites using PSTN communications using the same upgrade kit. In this case a cabinet mounted antenna kit is available which can be fitted to the site controller cabinet. It is also possible to upgrade a Gemini 1 unit by first converting it to a Gemini 2 using a Gemini 1 to Gemini 2 upgrade kit, thus allowing even older Gemini 1 sites to be converted to 3G.

Instation support for 3G
The RMS instation now supports IP connectivity as well as the more traditional PSTN and GSM connections.

For 3G a dedicated Instation router is required with external connection to the internet. The router provides connectivity to support up to 70 Virtual Private Networks between the Instation and connected 3G OMUs. Where more than 70 3G OMUs are required further routers may be added to the system.

Not all OMUs in a system need to be upgraded together and the Instation will support a mix of PSTN, GSM and 3G connection types.

- Eliminates reliance on the GSM network, which may become less available in the future.
- Simple upgrade to existing Gemini OMU sites.
- Secure connection via VPN
- New OMUs available already equipped with 3G routers
- Faster connection time as is ‘always on’ so does not need to dial
- Fully compatible with OMU MOVA enabling MOVA COM to be used over the 3G connection.
Technical specification

Outstation
- Compatible OMUs: Any Gemini 2 type (Upgrade from Gemini 1 possible using Gemini 1 to Gemini 2 upgrade kit)
- Compatible antenna types:
  - Existing cabinet mounted GSM type
  - Existing pole mounted GSM type
  - New cabinet mounted 3G type
- Compatible firmware: PB687, Ver 11 or above
- Typical 3G data usage: <100Mb / month
  Note: 3G network must allow IPSec tunnels and NTP

Instation
- No VPN connections per router: 70 max
- No VPN routers: 3 max
- No Instation comms channels: 10 max
  (Each channel supports either 3G or PSTN/GSM connectivity)
- Compatible Instation software: Ver 42 or above

Part Numbers
- 3G OMU upgrade kit: 667/1/32630/000
  (Includes 3G facility licence)
- Outstation cabinet antenna: 667/1/30835/000
- 3G OMU (complete): 667/1/32600/030
- Instation Router kit – 667/1/99106/070
  (Includes 70 site VPN)
- Gemini 1 to 2 upgrade kit: 667/1/32600/100

Documentation
- Gemini 2 GSM to 3G RMS Communications Conversion Quick start Guide: 667/Ci/32630/000