



Nera F33 Data Service with Compression

*For dial-up with data compression, see the application:
Mobile Data Service via RS-232, or
Mobile Data Service via USB*

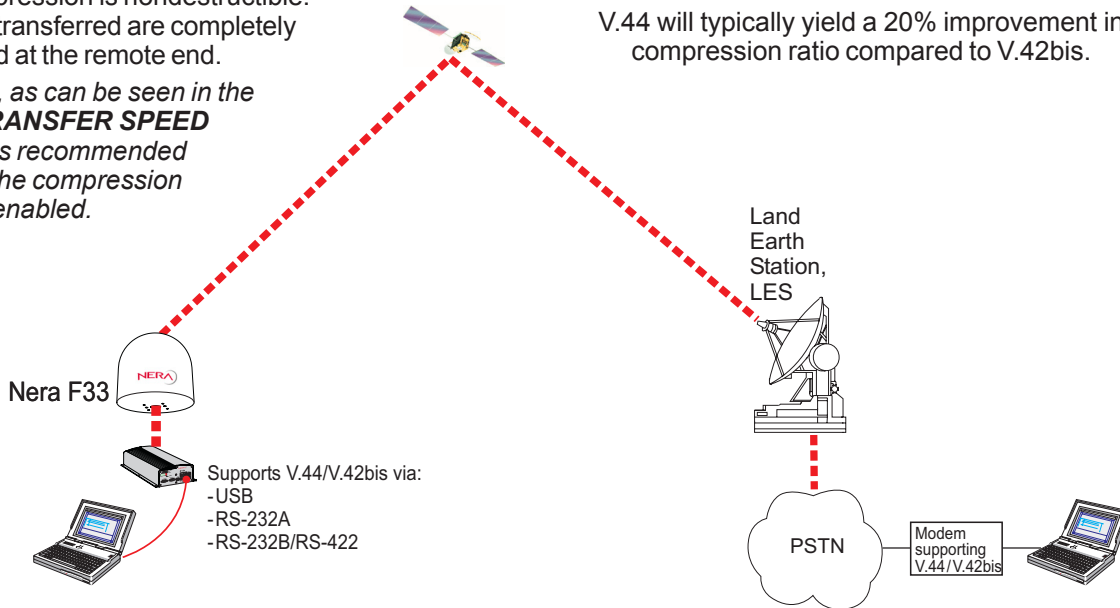
Nera F33 incorporates a data compression function providing up to four times 9.6 kbps increase in the transfer speed between the mobile and shore of:

- text files
- web browsing
- e-mail

Be aware that files that are already compressed such as jpeg, mpeg, zip files are not compressed during the data transfer.

The compression is nondestructible. The files transferred are completely recovered at the remote end.

*However, as can be seen in the **DATA TRANSFER SPEED** graph, it is recommended to leave the compression function enabled.*



The Nera F33 satellite terminal supports the V.44 and V.42bis standards.

During "negotiation" with the terrestrial modem, Nera F33 announces that it supports both these compression standards.

If the shore modem also supports V.44 then this is used in preference to V.42bis. If V.42bis only is supported, this will be used. If the called party does not support compression then the call will proceed without compression applied.

V.44 will typically yield a 20% improvement in compression ratio compared to V.42bis.

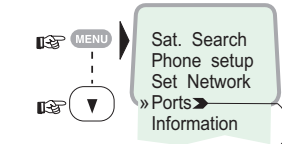


Compression function

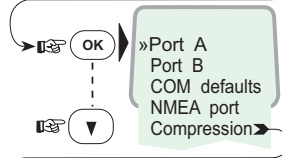
With the compression function set to **automatic** negotiation (default), the data call will proceed using the standard preferred by the shore modem. If the shore modem has no compression software, the data transfer will be uncompressed.

To set up and/or verify the compression:

1 Open the **MENU** and scroll down to **Ports**:



2 Scroll down to **Compression**:

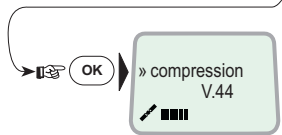
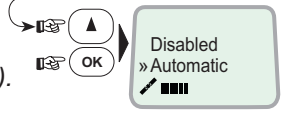


3 Selecting **Negotiation** allows setting the compression function to **Automatic** or **Disabled**, as required: (applies to all three serial ports).

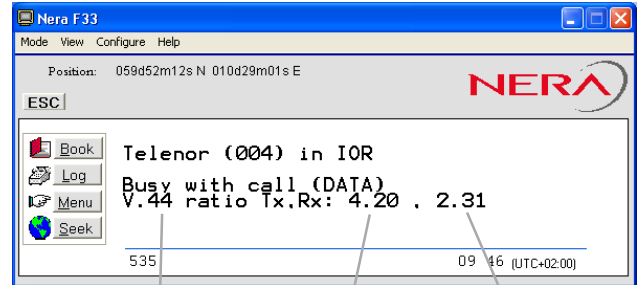


4 During transfer, selecting **Information** shows type of protocol used:

- **V.44**
- **V.42bis**
- **compression inactive**



When set up for data compression, the idle window in vtLite Mobile appears as shown below.



Examples:

Compression standard used.

Transmitted file compressed approx. four times.

Received file compressed approx. two times.

Note!

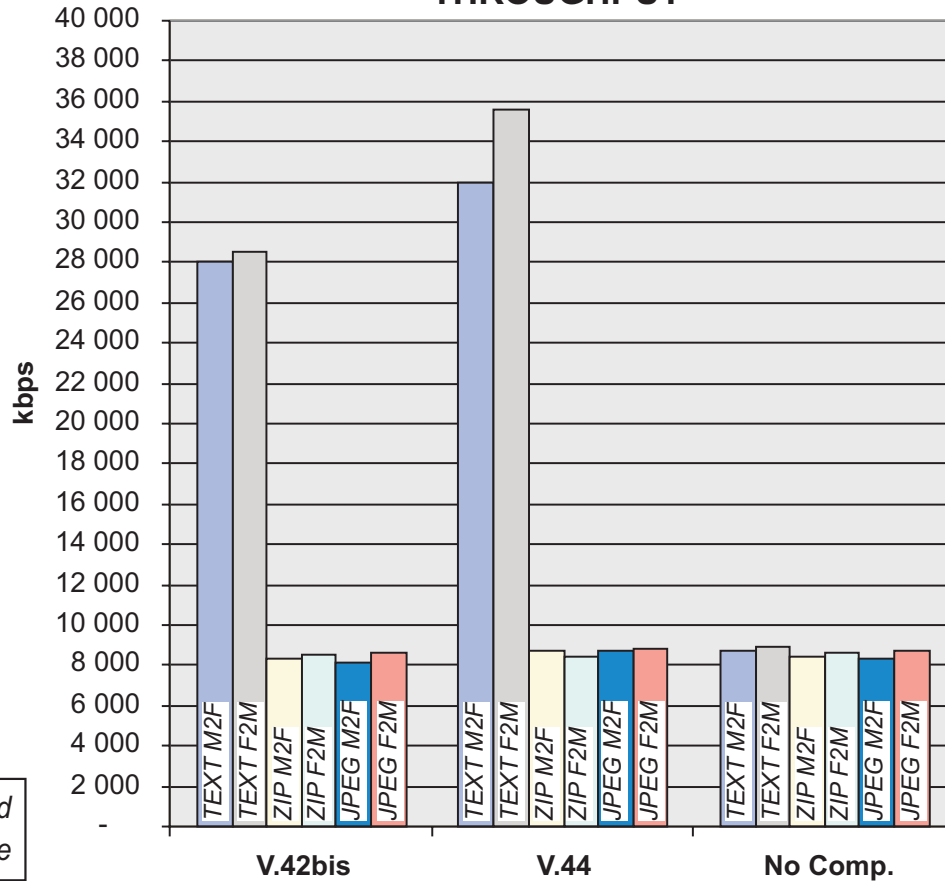
Disabled means no compression. **Automatic** means that AT command settings are valid, see "**Compression settings**".

If problems with the transfer, try reducing the port speed from 115200 bps to 57600 bps (recommended).

The speed can be set from the Display Handset.



THROUGHPUT



M2F: Mobile-to-Fixed
F2M: Fixed-to-Mobile



Compression settings

Note that the compression protocol chosen by the AT command is valid for that port only.

Some AT commands:

`AT+WCOMPS TD?`

Checks which compression protocol is set for the current port.

0=no compression, 1=V.42bis, 2=V.44, 3=negotiation (default)

`AT+WCOMPS TD=n`

Sets the current port to use a specific compression protocol, with n=0, 1, 2, 3 as above.

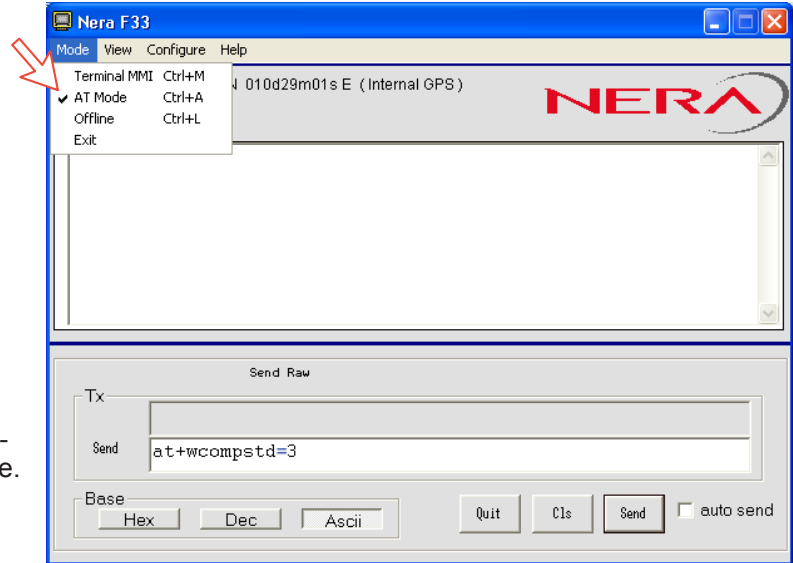
Only valid when you have selected **Automatic** in the Handset, see "compression function".

`AT&W`

Saves the port settings. If this command is not run, the port settings are turned back to default or previous settings after an MES restart.

`AT+WXR=1`

Reports the connection status; you can for example see the connection speed (9600kbps), ARQ mode, V.42bis or V.44 etc.



Note!

The vtLite Mobile AT mode window can be used to send AT commands to the port used. Use the **Send** button. Hyper Terminal may also be used.