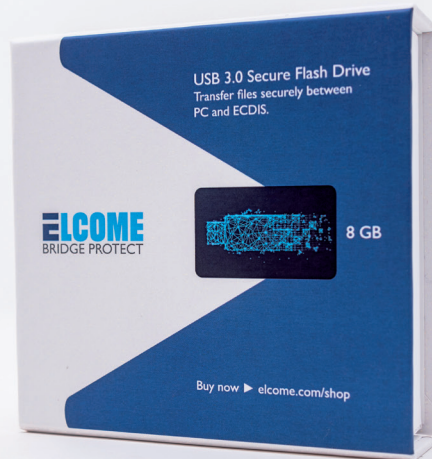




# Elcome Bridge Protect

## FREQUENTLY ASKED QUESTIONS



### What is Bridge Protect?

Bridge Protect is a tool developed by Elcome International to protect the ship's bridge IT systems from cyber attacks or unintentional malware when transferring files and loading updates to onboard computers.

### How are infected files introduced into the ship's systems?

Electronic Nautical Charts (ENC), Notices to Mariners (NtM) and software updates are sent to the ship by email or satellite data links when underway or on a DVD when in port. These files are generally downloaded or copied to a USB drive, which is then inserted into the ECDIS computer to upload the files. If a standard unprotected USB is used, it could introduce infected files that can spread to the entire interconnected network aboard the ship.

### What is included in the Bridge Protect package?

The Bridge Protect package includes (1) a special protected USB 3.0 flash drive with storage capacity of 8 GB and (2) client software. It is a simple and easy tool for transferring files into shipboard computers safely without the use of passwords or fingerprint checks.

### How does it work?

The Bridge Protect client software automatically locks the flash drive with a low-level file system that leaves no empty memory space in the USB storage medium, thereby preventing transfer of harmful files into the ship's computer.

### Is it difficult to install the Bridge Protect system?

You load the client software onto the USB following an easy and simple routine. Then the software automatically protects files being transferred on the USB to shipboard computers. You can re-use the protected USB endlessly, deleting files that have been transferred and loading new files onto it.

### How do I use it to upload ENC files to the ship's computer?

When ENC updates are received on the ship, you simply load the files, in either zipped or unzipped form, onto the protected Bridge Protect USB flash drive, using the client software interface. The loaded USB can then safely be inserted into the ECDIS for downloading the new updated files.



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### Does Bridge Protect meet international standards?

Bridge Protect can be incorporated as part of the Safety Management System stipulated by the International Maritime Organization (IMO) Resolution MSC 428 (98) and becomes a mandatory part of the annual verification of the company's Document of Compliance, which came into effect 1 January 2021.

### Why can't I use a normal off-the-shelf USB drive?

Standard off-the-shelf USBs can be used to bypass standard anti-virus protection. Some USB devices currently on the market can actually harm computers and the entire network. For instance, some USB devices have the functionality of working as a USB keyboard, and any number of keystrokes can be passed through without being detected by standard anti-virus protection.

Another danger is that a standard USB can be taken away from the bridge by crew members to be used to download files from their home or personal computers and then returned to the bridge, potentially introducing viruses. The Bridge Protect USB has very little value to anybody outside the bridge environment, since files can only be recorded onto the drive using custom software installed on the bridge.

### Is it compatible with all models of ECDIS?

Bridge Protect is compatible with Windows and Linux operating systems. As per the field tests and lab tests, it is also compatible with all ECDIS brands and models manufactured by Danelec Marine, Furuno, JRC, Kongsberg, Raytheon Anschütz, Simrad and all other models supporting either FAT32 or NTFS file systems.

### What happens if the Bridge Protect USB is formatted?

If the Bridge Protect USB drive needs to be wiped, the client software must be used. If it is formatted outside the client software, then the USB becomes permanently damaged and can no longer be used.

### Where can I learn more about recommended guidelines and best practices for shipboard cyber protection?

See [IMO Guidelines](#) on Maritime Cyber Risk Management (MSC-FAL.1/Circ 3 Annex). Alternatively, get in touch with Kostiantyn Matvieiev, Senior Manager for Charts & Publications, Elcome International, telephone +971 4 8121354, email [kostiantyn@elcome.com](mailto:kostiantyn@elcome.com).

### How can I order the Bridge Protect package?

Bridge Protect can be purchased from our [online shop](#). Orders are also accepted via email: [sales@elcome.com](mailto:sales@elcome.com).

### How much does it cost?

Bridge Protect costs AED 275 (US\$ 74.88) for one unit and AED 550 (US\$ 149.76) for two units excluding tax. It is a one-time purchase price with no recurring costs.



## HEADQUARTERS

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