

Superyacht Social Media Camera Network Plan

Vessel Profile: 100-Foot Charter Superyacht

Architecture Model: Store-and-Forward Network System

To build a high-performing social media pipeline around a 100-foot superyacht, the onboard network must intelligently manage high-resolution video assets within the constraints of marine internet. Because standard 24/7 raw video streaming is inefficient over satellite links, this deployment utilizes a **Store-and-Forward architecture**. Media is captured and cached locally, then compressed and uploaded to the cloud during off-peak hours.

1. Camera Placement & Core Zones

To capture optimal marketing content without invading guest privacy, marine-grade, 4K IP cameras (such as Axis or Hikvision Marine series) will be permanently mounted in the following exterior zones:

- **The Bow (Front Deck):** Positioned to capture wide-angle horizon shots, dramatic cruising footage, and marine life riding the bow wake.
- **The Aft Deck (Stern):** Focused on lifestyle content, showing guests relaxing, dining, or utilizing the swim platform.
- **The Flybridge / Sundeck:** High-vantage placement to capture 360-degree panoramas of destination harbors and coastlines.
- **The Anchor Pocket / Waterline:** A specialized waterproof housing to record low-profile or waterline action.

2. Onboard Network & Storage Infrastructure

Physical infrastructure must withstand harsh marine environments using shielded topologies:

- **Power over Ethernet (PoE):** Every camera connects via a single **Cat6A marine-shielded cable** directly back to the server room, delivering both power and data while eliminating saltwater interference.
- **Local Network Video Recorder (NVR):** Cameras stream 24/7 in native 4K resolution to a high-capacity local media server equipped with 10TB+ of solid-state storage (SSD) located inside the vessel's central server rack.

3. Cloud Upload Pipeline

The synchronization protocol securely offloads high-definition media files over the web to the Cloud utilizing a prioritized schedule:

Component	Purpose & Technical Implementation
Primary Internet	Starlink Maritime coupled with a multi-carrier 5G/6G cellular router for low-latency near-shore and offshore coverage.
Bandwidth Rules	A Peplink Router manages traffic prioritization, entirely blocking heavy cloud syncing during daytime operational hours to preserve guest Wi-Fi speeds.
The Daily Sync	At 2:00 AM local time, an automated script initiates. The local server transcodes the day's highlights into highly compressed H.265 video profiles.
Cloud Destination	Files are securely pushed via SFTP or automated API calls directly into a dedicated cloud storage bucket (e.g., AWS S3 or Google Cloud Storage).

4. Protocols for the Social Media Manager

- **Proxy Workflow:** To circumvent bandwidth constraints, the onboard script can automatically upload low-resolution proxy videos first. The social media manager can review these lightweight files remotely and request full 4K masters only for finalized content.
- **Guest Privacy Kill-Switch:** A physical switch will be integrated directly on the bridge. When toggled, it instantly cuts power to the camera PoE network switch, ensuring absolute privacy for high-profile clients.