# Frigate 4U Server — Bill of Materials

Replaces 2× Wisenet XRN-2011 · 10 cameras · detection, LPR, recording · 2 LAN · our own hot-swap bays

1 Nov 2026
Prices incl. KDV

| NEW PARTS TOTAL | BUDGET | HEADROOM | DRIVE BAYS |
|---|---|---|---|
| **₺77,677** | **₺80,000** | **₺2,323** | **13** |
| 11 items | 2× XRN-2011 @ ₺40k | 2.9% of budget | 5 front hot-swap (ours) + 10 inside |

Spend against NVR sale — 97.1% used

₺0 — ₺77,677 spent · ₺2,323 left — ₺80,000

## PARTS · CLICK A NAME TO OPEN THE SHOP PAGE

| | PART | SHOP | PRICE (₺) | SHARE | STATUS |
|---|---|---|---|---|---|
| 1 | CHASSIS<br>**TGC 415A 4U rack case**<br>10× 3.5″ fixed + 3× 5.25″ front bays · ATX · 7 full-height slots · 560 mm | Merpazar<br>merpazar.com | **11,688** | 15.0% | ✓ 4 in stock |
| 2 | CPU<br>**AMD Ryzen 5 5600 (tray)**<br>6 cores / 12 threads · AM4 · 65 W | Vatan<br>vatanbilgisayar.com | **6,499** | 8.4% | ✓ Ready |
| 3 | MOTHERBOARD<br>**MSI B550-A PRO**<br>ATX · 2 full-length slots · 2× PCIe x1 · 6 SATA · 2× M.2 · LAN port 1 | Vatan<br>vatanbilgisayar.com | **8,269** | 10.6% | ✓ Ready |
| 4 | MEMORY<br>**G.Skill Ripjaws V 32 GB**<br>2×16 GB · DDR4-3200 CL16 · desktop DIMM | Vatan<br>vatanbilgisayar.com | **18,419** | 23.7% | ✓ Ready |
| 5 | GPU<br>**ASUS Dual RTX 3050 OC 6 GB**<br>70 W · no power cable · object detection, LPR, video decode | Vatan<br>vatanbilgisayar.com | **18,689** | 24.1% | ✓ Ready |
| 6 | NETWORK · LAN PORT 2<br>**TP-Link TX201 2.5 GbE**<br>PCIe x1 · goes in the bottom x1 slot · camera network | Akakçe<br>akakce.com | **1,196**<br>incl. shipping | 1.5% | ✓ New |
| 7 | POWER SUPPLY<br>**MSI MAG A650BNL**<br>650 W · 80+ Bronze | Vatan<br>vatanbilgisayar.com | **3,309** | 4.3% | ✓ Ready |
| 8 | SYSTEM DRIVE<br>**Goodram PX600 Lite 256 GB**<br>NVMe Gen4 · M2_1 slot · OS + Frigate database | Vatan<br>vatanbilgisayar.com | **5,099** | 6.6% | ✓ Ready |
| 9 | HOT-SWAP KIT · CONNECTORS<br>**5× SATA 22-pin combo extension, 50 cm**<br>female end mounted in our printed backplane · drive plugs straight in | Akakçe<br>akakce.com | **1,500** | 1.9% | ✓ 299.90 each |
| 10 | HOT-SWAP KIT · PRINT + FAN<br>**PETG filament 1 kg + 80 mm cage fan**<br>printed 5.25″ cage, trays, rails · estimate | Any shop | **1,200** | 1.5% | ! Estimate |
| 11 | CPU COOLER<br>**MSI MAG CoreFrozr AA13**<br>152 mm tall: confirm case limit, else any cooler ≤130 mm | Vatan<br>vatanbilgisayar.com | **1,809** | 2.3% | ! Check height |
| | **Total** | | **₺77,677** | | |

## HOT-SWAP · BUILT BY US

| | |
|---|---|
| Front: 3D-printed cage in the 3× 5.25″ bays<br>4–5 drives on printed trays, 80 mm fan behind them | 4–5 bays |
| Backplane: printed plate holding 22-pin combo SATA sockets<br>drive slides in and mates; same as a commercial cage | ₺300 / bay |
| Inside: top-loading printed guides (phase 2)<br>slide server out on rails, lid off, swap while running | up to 10 |
| Software: SATA hot-plug on in BIOS, Linux mdadm/ZFS<br>detach drive in software before pulling it | ₺0 |
| Print in PETG or ASA; drives run 40–45 °C, PLA softens | |

## NETWORK

| | |
|---|---|
| LAN 1 · onboard RTL8111H<br>office network, Frigate UI | 1 GbE |
| LAN 2 · TP-Link TX201<br>camera network, kept separate | 2.5 GbE |

## DRIVES · 5 FROM THE NVRS, ₺0

| | |
|---|---|
| 2× WD Purple 6 TB + 1× 1 TB<br>plus 2 from NVR #2 | 5 drives |
| Recording, all 10 cameras<br>2× 6 TB mirrored ≈ 30 days | ~200 GB/day |

## ASK MERPAZAR

Max CPU cooler height · rail kit TGC-03S-660 price

Shops: Vatan Bilgisayar, Merpazar, Akakçe · “Estimate” rows are not shop prices

Prices checked 1 Nov 2026. Re-check before ordering.