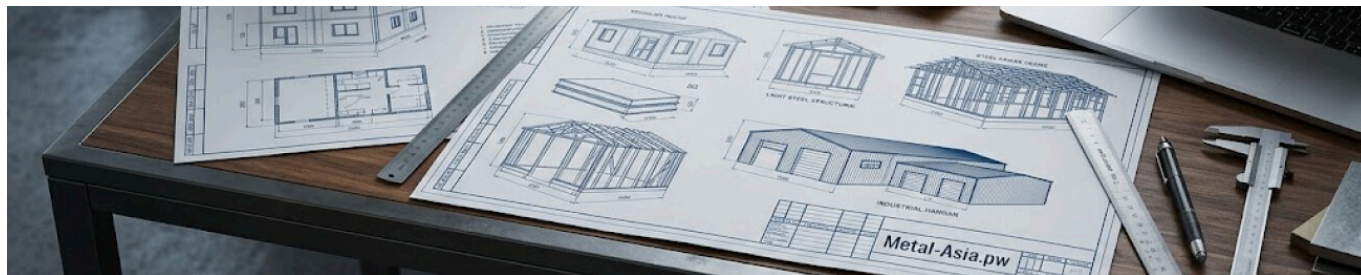


Commercial Proposal for Supply

Foldable Modular Dwelling Units 235-65 (ZDF01) for Rapid-Deployment Housing and Commercial Applications



Modular rapid-deployment units engineered for construction camps and commercial facilities

Executive Summary

Metal-Asia.pw delivers end-to-end global procurement solutions for foldable modular dwelling units Model 235-65 (ZDF01), manufactured in China to ISO-certified standards for international distribution. This commercial proposal is structured for procurement directors, supply chain managers, project development firms, and B2B/B2C distribution partners seeking compliant, scalable housing solutions.

The 235-65 unit represents a breakthrough in flat-pack architecture: collapsed to a transport height of 320 mm, expanded to a fully functional 13.2 m² living or workspace. The design is optimized for ISO container logistics, enabling cost-efficient sea freight to any global port. All components are factory-fabricated using standardized production protocols, ensuring consistent quality with lead times of 15–30 days depending on order volume.

Our firm specializes in [direct-source B2B procurement and industrial supply chain management from China](#), with operational expertise since 2009. We operate on a direct-manufacturer model — no intermediary markups — providing full-cycle support from supplier qualification and quality audit to customs clearance and door-to-door delivery. Every shipment is backed by documented compliance, transparent pricing, and direct access to production facilities.

Technical Specifications — Model 235-65 (ZDF01)

Fundamental Parameters

No.	Parameter	Value	Notes
1	Model Designation	235-65 / ZDF01	Foldable modular dwelling unit
2	External Dimensions (Deployed)	5800 x 2480 x 2680 mm	Length x Width x Height
3	Internal Dimensions	5640 x 2340 x 2580 mm	Usable interior volume

No.	Parameter	Value	Notes
4	Dimensions (Collapsed)	5800 x 2480 x 320 mm	Transport configuration
5	Gross Weight	1000–1100 kg	Configuration-dependent
6	Usable Floor Area	13.2 m ²	Net interior space
7	Wall Panel Thickness	65 mm	Sandwich composite construction
8	Thermal Insulation	Mineral wool (basalt)	Density 50 kg/m ³
9	Roof Load Capacity	1.0 kN/m ²	Design snow load
10	Floor Load Capacity	4.2 kN/m ²	Traffic load rating
11	Wall Pressure Rating	0.5 kN/m ²	Wind load design
12	Fire Resistance Class	Class A	Highest rating per EN 13501-1
13	Seismic Resistance	MSK Intensity 8	Equivalent to IBC Seismic Design Category D
14	Wind Resistance	Beaufort Scale 10	Design wind speed up to 28 m/s
15	Service Life	10 years	Under standard operating conditions
16	Warranty Period	1 year	Structural and electrical systems

Structural Frame System

Roof Assembly

No.	Component	Material	Dimensions	Thickness mm	Unit	Qty
1	Galvanized square tube	Q235 steel	40 x 40 x 2320 mm	1.2	pcs	4
2	Galvanized square tube	Q235 steel	20 x 40 x 1100 mm	1.2	pcs	5
3	Galvanized square tube	Q235 steel	20 x 20 mm	1.2	pcs	2
4	Galvanized square tube	Steel	70 x 70 x 5800 mm	1.2	pcs	2
5	Steel angle bar	Steel	30 x 30 x 5640 mm	1.2	pcs	2
6	Steel angle bar	Steel	30 x 30 x 2320 mm	1.2	pcs	2
7	Color-coated corrugated sheet	Galvanized steel	Standard profile	0.32	sheet	7

No.	Component	Material	Dimensions	Thickness mm	Unit	Qty
8	Basalt mineral wool insulation	Basalt fiber	12000 x 1240 mm	50	m	12

9	Ceiling panel	Galvanized steel	Standard	0.23	sheet	7
---	---------------	------------------	----------	------	-------	---

6-Meter Side (Long Wall)

No.	Component	Material	Dimensions	Thickness mm	Unit	Qty
10	L-shaped steel plate	Steel	1130 mm	1.8	pcs	4
11	L-shaped steel plate	Steel	1140 mm	1.8	pcs	4
12	Galvanized P-type steel tube	Q235	40 x 80 x 5800 mm	1.2	pcs	8
13	Galvanized P-type steel tube	Q235	1080 mm	1.2	pcs	8
14	High-strength galvanized hinge	Steel	Standard	—	pcs	34
15	Sandwich wall panel	Steel/wool composite	1080 x 2845 mm	0.23	sheet	8
16	Color steel buckle groove	Galvanized steel	1080 mm	0.4	pcs	8
17	Galvanized buckle groove	Galvanized steel	1080 mm	1.2	pcs	8
18	D-type rubber seal	EPDM rubber	5800 mm	—	pcs	24

3-Meter Side (Short Wall)

No.	Component	Material	Dimensions	Thickness mm	Unit	Qty
19	Galvanized P-type steel tube	Q235	2320 mm	1.2	pcs	4
20	Galvanized P-type steel tube	Q235	2370 mm	1.2	pcs	4
21	Galvanized buckle groove	Steel	2280 mm	1.3	pcs	1

No.	Component	Material	Dimensions	Thickness mm	Unit	Qty
22	Galvanized buckle groove	Steel	975 mm	1.3	pcs	1
23	Sandwich wall panel	Steel/wool composite	950 mm	0.23	m	9.66
24	Color steel angle	Galvanized steel	50# profile	1.3	m	20.41
25	PVC sliding window unit	PVC / glass	925 x 930 mm	0.4	pcs	2
26	Entry security door	Steel	970 x 1980 mm	—	pcs	1
27	Rubber dust-proof seal	EPDM rubber	—	Sealed	m	21.32

Base Structure (Floor System)

No.	Component	Material	Dimensions	Thickness mm	Unit	Qty
28	Custom galvanized square tube	Steel	60 x 140 x 5800 mm	1.3	pcs	2
29	Custom galvanized square tube	Steel	60 x 80 x 2340 mm	1.3	pcs	2
30	Galvanized square tube	Q235B	35 x 35 x 2320 mm	1.1	pcs	9
31	Cement composite floor panel	Cementitious	1126 x 2335 mm	15	sheet	5

Finishing and Engineering Systems

System	Description	Material	Thickness mm	Notes
External roofing	Color-coated corrugated sheet	Hot-dip galvanized steel	0.32	7 sheets, arched center profile
Internal ceiling	Color steel veneer V831	Galvanized steel	0.23	Ceiling lining
Wall panels — 6m side	Sandwich composite panel	Steel / wool / steel	65	0.23 + 50 kg/m ³ + 0.23
Wall panels — 3m side	Sandwich composite panel	Steel / wool / steel	65	0.23 + 50 kg/m ³ + 0.23

System	Description	Material	Thickness mm	Notes
Floor system	Fire-resistant cement composite	Cementitious	15	Moisture-resistant grade
Frame coating	Electrostatic powder coating	Polyester resin	—	Pure white or light yellow

Electrical System — CE-Certified Assembly

No.	Component	Specification	Qty	Compliance
1	Main supply cable	Annealed copper 2.5 mm ²	1	CE / IEC 60228
2	Circuit breaker	20A rated	1	EN 60898
3	Air-conditioning socket	3-pin, 16A	1	CE marked
4	5-pin switched socket	10A rated	1	Internal mount
5	5-pin standard socket	10A rated	1	Internal mount
6	LED ceiling luminaire	12–18W, 4000K	1	CE / RoHS
7	Moisture-proof wiring assembly	IP44 rated	Full set	All devices CE-certified

Doors and Windows

No.	Component	Dimensions mm	Material	Qty	Notes
1	Entry security door	970 x 1980	Steel, warm white finish	1	High-grade anti-intrusion
2	PVC sliding window unit	925 x 930	PVC, 4mm glass	2	Warm white, single or double glazing

Logistics and Supply Chain Compliance

Container Loading Capacity — Flat-Pack Configuration

Container Type	Internal Dimensions mm	Volume m ³	Max Payload kg	Unit Capacity 235-65	Notes
20GP	5898 x 2352 x 2393	33.2	21700	4–5 units	Pilot batch optimization
40GP	12032 x 2352 x 2393	67.7	26730	6–8 units	Standard sea freight

Container Type	Internal Dimensions mm	Volume m ³	Max Payload kg	Unit Capacity 235-65	Notes
40HQ	12032 x 2352 x 2698	76.4	26730	6–8 units	Optimal cost-per-unit ratio

Collapsed Unit Transport Parameters

Parameter	Value
Length	5800 mm
Width	2480 mm
Height	320 mm
Volume	4.61 m ³
Weight	1000–1100 kg
Loading method	Flat-pack disassembled components
Packaging	Steel pallets, PE film, cardboard corner guards

Packaging and Marking Protocol

Stage	Description
Frame assembly	Welded steel pallets, steel strapping
Panels	PE shrink film, cardboard edge protection
Hardware	Partitioned cardboard boxes
Electrical	Dedicated box with CE labeling
Doors and windows	Timber frame crating, foam glass protection
Unit marking	Model 235-65/ZDF01, QTY 1 SET, N.W. 1000 KG, G.W. 1100 KG, Dimensions 5800x2480x320 mm, Made in China, WWW.METAL-ASIA.PW

Global Procurement Services and Supply Chain Compliance

Metal-Asia.pw provides comprehensive supply chain services to ensure compliant, transparent, and direct-access procurement for international partners:

- [Engineering Audit for Complex Orders](#) — Technical verification of manufacturer capabilities, drawing validation, and pre-production quality assurance.
- [B2B Procurement Services from China](#) — End-to-end sourcing from supplier identification to delivery at destination.

- [Customs and International Logistics](#) — Full customs documentation, tariff classification, and multimodal freight management.
- [B2B Supplier Audit](#) — On-site factory inspection, capacity verification, and quality system assessment.
- [Comprehensive Sourcing and Procurement](#) — Configuration optimization and batch procurement strategy.
- [Integrated Engineering Systems](#) — HVAC, plumbing, electrical, and structural integration for turnkey projects.
- [Technical Specification Guidelines for Chinese Manufacturers](#) — Methodology for drafting enforceable technical specifications.
- [What is a Technical Specification \(TS\)](#) — Structure and compliance requirements for B2B supply documentation.

Application Verticals

Sector	Application	Recommended Order Volume
Construction	Worker accommodation camps for infrastructure projects	10–100 units
Energy and Mining	Remote site housing for extraction operations	20–200 units
Commercial	Temporary and permanent on-site offices	5–50 units
Security	Guard posts and perimeter control stations	2–20 units
Hospitality	Guest cabins for campgrounds and eco-resorts	5–30 units
Emergency Response	Rapid-deployment shelter for disaster relief	20–500 units
Retail	Temporary retail units and exhibition stands	3–20 units
Healthcare	First-aid stations and mobile clinic modules	5–50 units

Competitive Advantages — Model 235-65

Advantage	Technical Description
Rapid deployment	2–4 workers deploy one unit in 1–2 hours on prepared ground
Transport efficiency	Collapsed height 320 mm reduces logistics cost by up to 70% versus conventional modular units
Modular scalability	Units connect linearly or orthogonally into multi-module complexes
Foundation-free installation	Deploys on level ground, concrete pads, or screw pile foundations
All-climate operation	50 kg/m ³ insulation maintains comfort from -30°C to +40°C ambient

Advantage	Technical Description
Fire safety	Class A non-combustible construction materials per EN 13501-1
Seismic compliance	MSK Intensity 8 — meets requirements for Seismic Design Category D
Wind load compliance	Beaufort 10 — rated for sustained winds up to 28 m/s
Plug-and-play electrical	Complete pre-wired system with CE-certified components
Proven durability	10-year service life under standard operating conditions

Project Gallery



Prefabricated rapid-deployment structures for commercial and industrial applications

Frequently Asked Questions (FAQ)

Q1: What is the on-site assembly time for a single unit?

A: Deployment of one 235-65 unit by a 2-4 person crew takes 1-2 hours on a prepared surface. The process includes unfolding the frame, securing wall panels with bolted connections, connecting the pre-wired electrical system, and installing the entry door lock. For multi-unit complexes connected in linear or orthogonal configurations, assembly extends to 4-6 hours depending on the number of modules. We

provide detailed assembly documentation and can dispatch a supervisory crew to the project site upon request.

Q2: What foundation preparation is required?

A: The 235-65 does not require a traditional strip foundation. Acceptable base options include: a 100–150 mm reinforced concrete slab, a screw pile system, a pier-and-beam support structure, or a mobile anchor system for temporary installations. The critical requirement is a level horizontal surface with a grade not exceeding 2%. For soft or unstable soils, a geotextile sublayer is recommended. Foundation preparation is the responsibility of the client or can be contracted separately under our installation supervision agreement.

Q3: What is the minimum order quantity (MOQ)?

A: The minimum order is 1 unit for pilot or demonstration purposes. However, the optimal batch for cost-efficient sea freight is 6–8 units per 40-foot high-cube container (40HQ). Volume discounts apply at 20+ units (production discount), 50+ units (logistics and customization concessions), and 100+ units (individual pricing and dedicated production scheduling). We support phased delivery schedules for large projects to align with construction timelines.

Q4: Is customization available for dimensions and specifications?

A: Yes. The base 235-65 platform supports the following customization options: powder-coat color selection for the frame, alternative window and door configurations, additional electrical outlets and lighting circuits, upgraded insulation density (up to 100 kg/m³), reinforced frame for increased snow load regions, and sanitary module integration (sink, toilet, shower). Dimensional modifications require structural recalculation and manufacturer approval, extending lead time by 10–15 days. All custom specifications are documented in a signed Technical Specification prior to production.

Q5: What documentation and certifications accompany each shipment?

A: Standard documentation includes: a detailed packing list with component inventory, assembly instructions in English, electrical wiring schematic, CE conformity certificate for electrical components, and unit passport with technical parameters. Upon request, we provide: Certificate of Origin (Form A), EAC/Customs Union Declaration of Conformity, fire resistance and structural load test reports, and a factory photo documentation package. For large orders, third-party inspection (SGS, Bureau Veritas, or equivalent) can be arranged at the manufacturing facility at the client's expense.

Q6: How is delivery and customs clearance handled?

A: We coordinate sea freight from Chinese ports (Qingdao, Tianjin, Shanghai) to the destination port specified by the client. Customs clearance is managed by our in-house trade compliance team with correct HS code classification for modular buildings. Typical transit times: 25–45 days to Mediterranean and European ports, 35–55 days to North American West Coast, 20–35 days to Middle Eastern ports. Multimodal options (sea + rail) are available for landlocked destinations. Delivery costs are quoted individually based on batch volume, Incoterms terms, and final destination.

Q7: Can multiple units be connected into a single complex?

A: Yes. The modular design supports both linear (side-by-side) and orthogonal (corner) connections. Weatherproof joining is achieved through transition profiles and EPDM compression seals. A 50–80 mm technical gap is recommended at linear joints, filled with structural sealant. For complexes of 4+ modules, we recommend a covered walkway or canopy to protect joint areas from precipitation. We provide standard connection drawings and offer design consultation for custom multi-module layouts.

Q8: What are the warranty terms and after-sales support?

A: Standard warranty covers structural integrity and electrical systems for 1 year from the date of delivery. Warranty applies to manufacturing defects in materials and workmanship; it does not cover damage from improper installation, unauthorized modification, or force majeure events exceeding design loads (wind >28 m/s, seismic >MSK 8). During the warranty period, we provide free replacement of defective components with delivery to the project site. Post-warranty support includes spare parts supply (panels, seals, hardware, electrical components) at manufacturing cost plus freight.

Contact and Procurement Inquiry

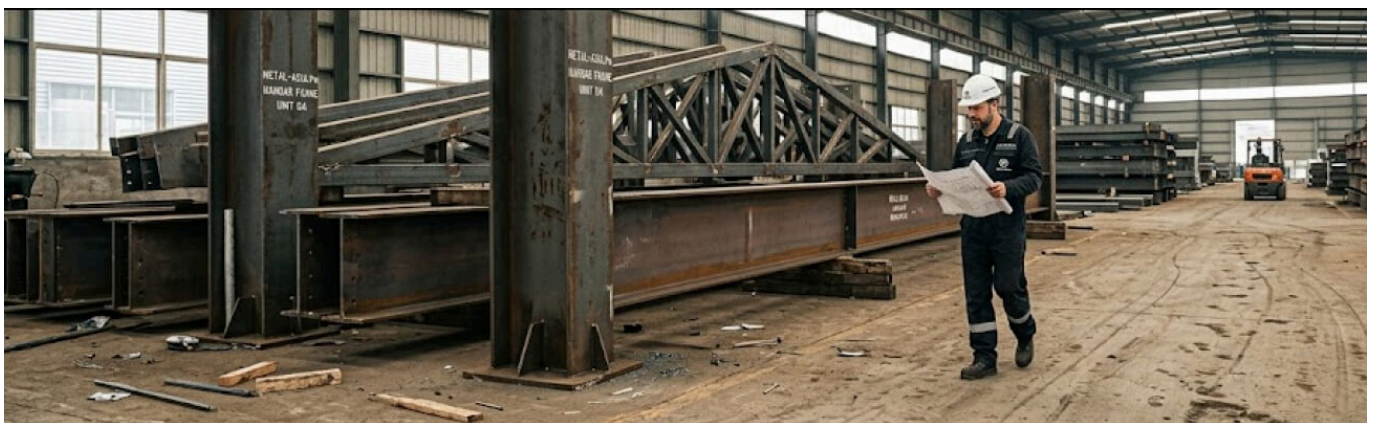
For detailed service listings and technical documentation, visit [Metal-Asia.pw](https://www.metal-asia.pw).

For procurement inquiries, volume quotations, and supply chain compliance questions:

Client Services Department:

- WhatsApp: +86 132 50100874
- Telegram: @China_metal_supply
- Email: zakaz@metal-asia.pw
- Corporate Website: www.metal-asia.pw

Document Author: [Milosh Kovachevi](#)



Turnkey foldable modular units with global logistics and compliance support

This commercial proposal is provided for informational purposes and does not constitute a public offer. Final delivery terms, pricing, and lead times are subject to individual contract agreement. The manufacturer reserves the right to modify technical specifications without prior notice to improve product quality and compliance with evolving standards.

Metal-Asia.pw | Global Procurement and Industrial Supply Chain Solutions from China since 2009.