



## 6061 Aluminum Profile for Waterproof Electrical Box with Customized CNC Machining and Precision Machining

Our Product Introduction

for more products please visit us on [aluminumextrusion-profiles.com](http://aluminumextrusion-profiles.com)

### Basic Information

- Certification: SONCAP, ISO, RoHS, TUV
- Minimum Order Quantity: 500
- Price: 1

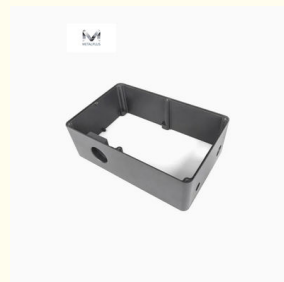
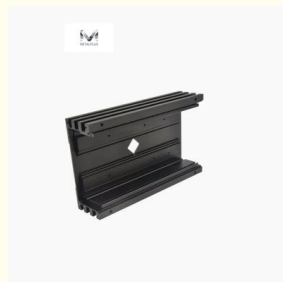
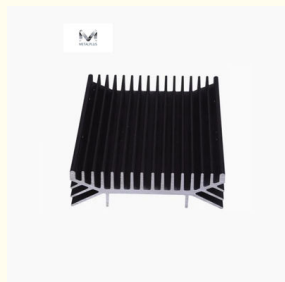


### Product Specification

- Grade: 6000 Series
- Temper: T3-T8
- Alloy: 6063
- Surface Finishing: Anodic Oxidation
- Tensile Strength:  $\geq 265\text{Mpa}$
- Yield Strength:  $\geq 245\text{Mpa}$
- Elongation:  $\geq 8\%$
- Production Capacity: 50000PCS /Month
- Max Diameter: 350mm
- Extrusion Lines: 44
- Anodizing Lines: 6
- Powder Spraying Lines: 4
- Machining Centers: 12
- Punching Machines: 30
- Bending Machines: 10



### More Images



## Product Description

### 6061 Aluminum Profile for Waterproof Electrical Box with Customized CNC Machining

MetalPlus manufactures high-quality customized standardized enclosures, including aluminum profile housing, die-cast aluminum boxes, standard aluminum chassis, rack mount housing, and CNC precision machined parts.

#### Product Features

**Material Options:** Al6063, Al6061, Al6005, Al6060 in T4, T5, T6, T66 tempers

**Design Features:** Slots in extrusion for PCB and component mounting

**Surface Treatments:** Anodizing, bead blasting, silk screening, various plating options, painting, powder coating, and more

**Performance:** Excellent EMC shielding, corrosion resistance, heat dissipation

**Machining Capabilities:** Drilling, bending, precise cutting, and fabrication

**Applications:** Communication, medical, photoelectric, safety, and instrumentation

#### Product Components

S/N	Part Name	Quantity	Material
1	Extrusion profile	1	AL6063
2	Front and rear panels	2	AL
3	Screws	4/8	SS

#### Key Specifications

Aluminum top and bottom plate with case design

Ideal for rail transit, power equipment, marine monitoring, and harsh environments

Extruded aluminum frame with die-cast panels for waterproofing and heat dissipation

Horizontal PCB/chassis mounting via inner-grooved frame

Suitable for industrial control boxes, outdoor WiFi access points, and measurement instruments

#### Technical Data

##### Chemical Composition (%):

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Impurity	Al
6063	0.2-0.6	0.35	0.1	0.1	0.45-0.9	0.1	0.1	0.1	0.15	Rest
6061	0.4-0.8	0.7	0.15-0.4	0.15	0.8-1.2	0.04-0.35	0.25	0.15	0.15	Rest

##### Mechanical Properties:

Alloy	Temper	Tensile Strength	Yield Strength	Elongation
6063	T5	≥ 160Mpa	≥ 110Mpa	≥ 8%
6061	T6	≥ 265Mpa	≥ 245Mpa	≥ 8%

#### Technical Support

Custom design services including CAD drawings and 3D models

R&D team for design optimization and cost reduction

Complete in-house production from design to surface treatment

Strict quality control throughout manufacturing process

#### Manufacturing Capabilities

**Extrusion:** 44 aluminum extrusion lines with maximum diameter of 350mm

**Anodizing:** 6 production lines with uniform oxidation film thickness

**Painting:** 4 powder spraying lines using Gema Switzerland equipment

**CNC Machining:** 12 PRATIC machining centers for complex profile processing

#### Quality Assurance

ISO9001:2015, ISO13485:2016 certified

SGS, RoHS, TU compliant  
Strict quality control procedures  
NDA (Non-disclosure Agreement) available

### Applications

Inverters, signal amplifiers, video pushers, lithium-ion battery changers, mini hosts



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