

RAYTRON

RAYTRON NEW ENERGY

(ZHEJIANG) CO., LTD



ONE-STOP PEM HYDROGEN SOLUTION SINCE 2012.



28

China National Patents

China National High-Tech Enterprise



36,000

Capacities PTL Production 36,000 m² / year

China National Standard Drafting Unit

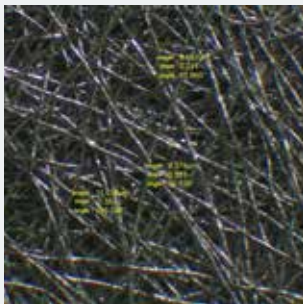


20+

Non-Ferrous Metals Industry Experience 20+ Years



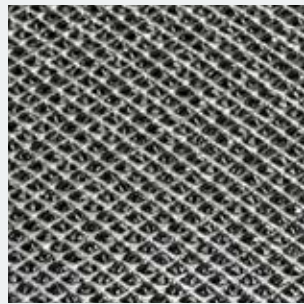
METALLIC FIBER FELT ▶



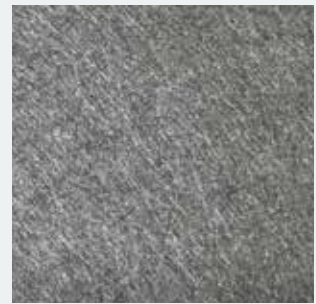
Gradient porosity



Gradient porosity



A side: Multi-layer tension net








B side: Titanium fiber felt

Parameters

-  Material
Titanium / Nickel / Hastelloy
-  Maximum Size
1500*1200 mm
-  Porosity
55%~70%
-  Thickness
0.20 mm, 0.25 mm, 0.40 mm, 0.60 mm,
0.80 mm, 1.00 mm, 2.00 mm.

Features

-  Three-dimensional grid porous structure;
-  Strong corrosion resistance;
-  Optimal electrolysis performance;
-  High porosity and current density;
-  Uniform pore size distribution.

SPECIAL PRODUCT

PEM collect-diffusion integrated product
(multi-layer titanium mesh + titanium felt)

Parameters

- Total Thickness
1.00~2.50 mm
- Thickness Tolerance
±0.05 mm
- Titanium Fiber Felt Breathability
≥350L / (min*dm²)
- Titanium Fiber Felt Porosity
55%~70%
- Titanium Fiber Felt Thickness
0.40/0.60 mm
- Maximum Size
650*650 mm
- Multi-layer Titanium Mesh Layers
2~5

CATALYST ▶



Product Category

CATEGORY	TYPE	CONTENT	ECSA	SIZE
Pt black	HiCaP100	>95wt.% Pt	40 m ² /g	5.6 nm
PtRu	HiCaPR100	65wt.% Pt, 35wt.% Ru	76 m ² /g	3.2 nm
PtRu/C	HiCaPR60	40wt.% Pt, 20wt.% Ru, 40wt.% C	40 m ² /g	4.0 nm
Pt/C	HiCaP40	40wt.% Pt, 60wt.% C	95 m ² /g	2.8 nm
	HiCaP60	60wt.% Pt, 40wt.% C	90 m ² /g	3.1 nm
	HiCaP70	70wt.% Pt, 30wt.% C	55 m ² /g	3.3 nm
Pd/C	HiCaPd20	20wt.% Pd, 80wt.% C	112 m ² /g	3.8 nm
	HiCaPd40	40wt.% Pd, 60wt.% C	65 m ² /g	4.6 nm
IrO ₂	HiCaIO100	>95wt.% IrO ₂	25 m ² /g	7.5 nm
Ir	HiCaI100	>95wt.% Ir	53 m ² /g	4.5 nm

※ Catalyst loading, particle size, composition, etc. can be customized according to customer requirements.



MEMBRANE ELECTRODE ASSEMBLY ▶

Features



Low Precious Metal Usage
 $0.8 \text{ mg}_{\text{Ir}}\text{cm}^{-2}$
 $0.3 \text{ mg}_{\text{Pt}}\text{cm}^{-2}$



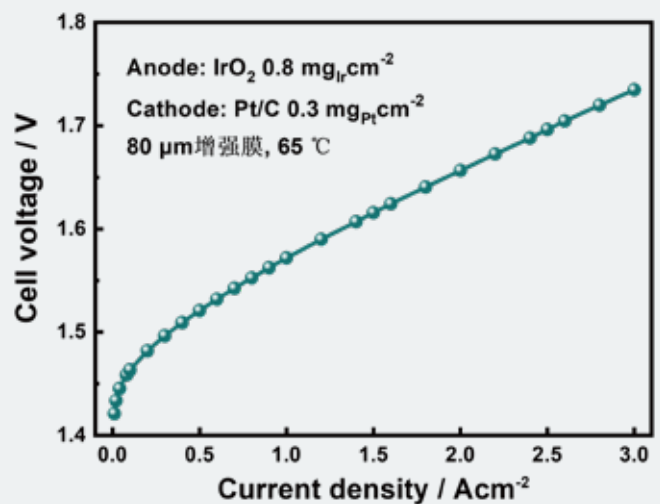
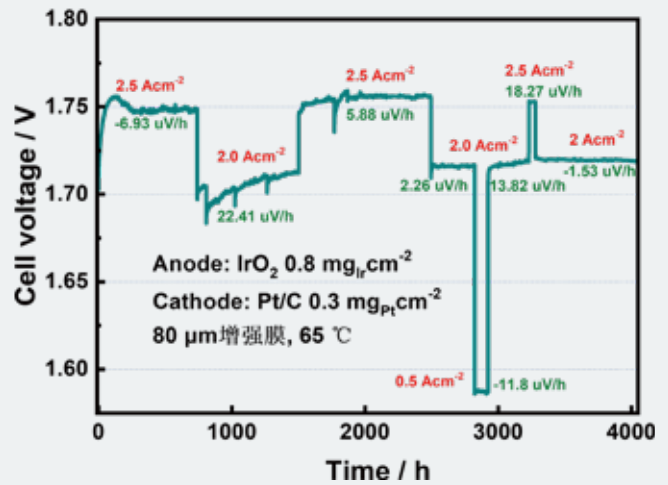
High Performance
 $1.71 \text{ V}@2.0 \text{ Acm}^{-2}$



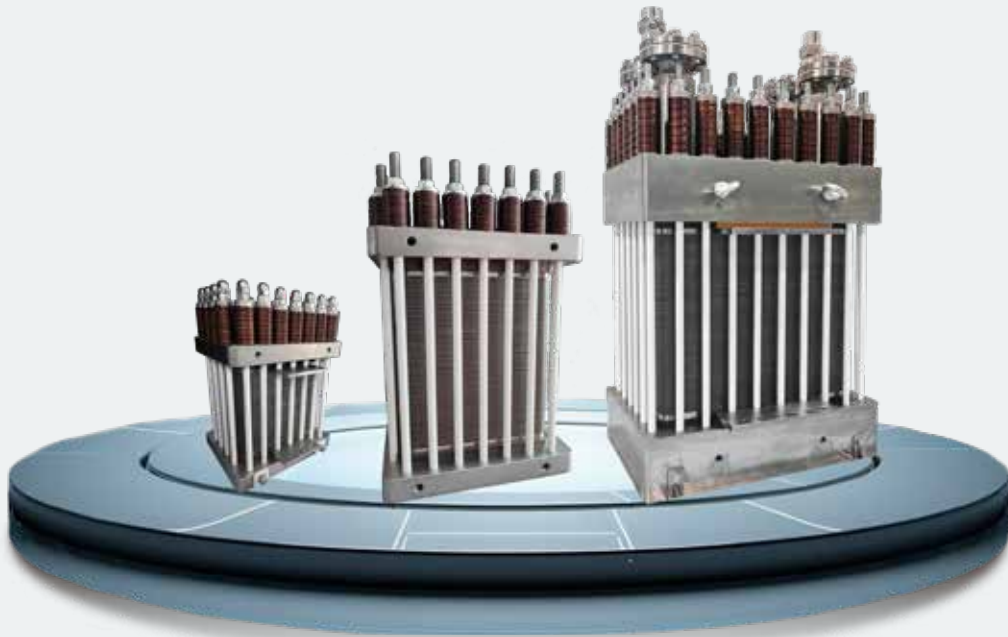
Low Oxygen Medium Hydrogen
 $<500 \text{ ppm}@0.2 \text{ Acm}^{-2} (1.6 \text{ MPa})$



Long Durability
 $\leq 5 \mu\text{V/h}@4,000\text{h}$



RYZER EFFICIENT PEM STACK SERIES ▶



Parameters



Rated H₂ Production / Stack
250 Nm³H₂/h (Optional)



Rated Energy Consumption
4.1 kWh/Nm³ H₂ @1.5 Acm⁻²



Cell Voltage Range (Consistency)
≤ 30 mV



Outlet Pressure
≤ 3.0 MPa (Optional)

RYZER EFFICIENT HYDROGEN ◀ PRODUCTION SYSTEMS



Parameters



Rated Hydrogen Production Rate
5~500 Nm³H₂/h (Optional)



High Purity Hydrogen
H₂ purity ≥ 99.999%



Hydrogen Outlet Pressure
≤ 3.0 MPa (Optional)



Cold / Warm Startup Time
≤ 20 min/3s



Operating Range
10%~120%



Safe and Reliable
CE、ASME Certification

ZHEJIANG



RAYTRON NEW ENERGY (ZHEJIANG) CO., LTD

Factory in China

6-1 Haijiao Ave, Fengqiao, Zhuji, Zhejiang, P.R.China

Sales Manager

[Nick Guo](#)

Tel: +86-186-575-362-77

E-mail: info@raytron.group

Sales office for Europe

64 Pinhas Rutenberg St, Ramat Gan, Israel 5227502

Sales Representative

[Medini Ltd](#)

Tel: +972-3-5059-776

E-mail: medini@raytron.group

Sales Office for South America

399 Barbara Heliodora st, Suite 509, GV, MG, Brasil. 35010-040

Sales Representative

[Bruno Lana Coelho](#)

Tel: +55-31-984-772-009

E-mail: bruno@raytron.group

Sales Office for Turkey

YAYLACIK MAH.11 SK.NO 26 İÇ KAPI NO:5 MERKEZ/
KIRIKKALE

[Ercan ÖZTÜRK](#)

Tel: +90 544 223 61 75

E-mail: ercan@raytron.group