Small Modular Reactors

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<u>Outline</u>

Under Construction - Early 2025

My cut-and-paste edit of Wikipedia's SMR List → Western designs only, sorted by "Status"

List of small nuclear reactor designs ^[1]									
Name ¢	Gross power (MW _e)	Type ¢	Producer +	Country +	Status -				
CAREM	27–30	PWR	CNEA	Argentina	Under construction				
VOYGR ^[68]	50-77 (x6) ^[45]	PWR	NuScale Power	United States	Licensed in the USA (50 MWe module). Seeking NRC licensing for reactor power output upgrade to 77 MWe of 6 modules (462 MWe).				
SMART100	110	PWR	KAERI	South Korea	Licensed in Korea (standard design approval)				
SMR-300	300	PWR	Holtec International	United States	Seeking UK licensing; ^[40] US NRC pre- application communications initiated ^[39]				
Rolls-Royce SMR	470	PWR	Rolls-Royce	United Kingdom	Seeking UK GDA licensing in April 2022 ^[30] A 16-month assessment was started in April 2023 ^[31]				
ARC-100	100	SFR	ARC Nuclear	Canada	Design (Vendor Review) ^[4]				
BWRX-300 ^[9]	300	BWR	GE Hitachi Nuclear Energy	United States/ Japan	Design (Pre-licensing communications with the US NRC initiated. ^[10])				
eVinci ^[14]	5	HPR	Westinghouse Electric Company	United States	Design (Pre-licensing communications with the US NRC initiated. ^[15])				
SSR-W	300-1000	MSR	Moltex Energy ^[43]	United Kingdom	Design (Phase 1, vendor design review). [44]				
4S	10–50	SFR	Toshiba	Japan	Design (Detailed)				
AP300 ^[3]	300	PWR	Westinghouse Electric Company	United States	Design (Detailed)				
BANDI-60	60	PWR	KEPCO	South Korea	Design (Detailed) ^[6]				
IMSR400	195 (x2)	MSR	Terrestrial Energy ^[17]	Canada	Design (Detailed)				
S-PRISM	311	FBR	GE Hitachi Nuclear Energy	United States/ Japan	Design (Detailed)				
Nuward	unknown	PWR	consortium	France	Design (Conceptual). In July 2024, existing design discontinued for a simpler redesign. ^{[23][24]}				
G4M	25	LFR	Gen4 Energy	United States	Design (Conceptual) (Company Ceased Trading)				
CANDU SMR	300	PWR (Heavy)	Candu Energy Inc.	Canada	Design (Conceptual)				
Copenhagen Atomics Waste Burner	50	MSR	Copenhagen Atomics	Denmark	Design (Conceptual)				
Energy Well ^[12]	8.4	MSR	cs:Centrum výzkumu Řež ^[13]	Czechia	Design (Conceptual)				
Flexblue	160	PWR	Areva TA / DCNS group	France	Design (Conceptual)				

In Operation as of 2025 (0)

Under Construction (1 in Argentina)

Licensed (2) or Seeking License (2)

Detailed Design → Design Concept only

Abandoned or Cancelled

	Abandoned of Cancelled							
	Fuji MSR	200	MSR	International Thorium Molten Salt Forum (ITMSF)	Japan	Design (Conceptual)		
	GT-MHR	50	GTMHR	General Atomics, Framatome	United States/ France	Design (Conceptual)		
	HAPPY200	200 MWt	PWR	SPIC	China	Design (Conceptual)		
	HTMR-100	35	GTMHR	Stratek Global	South Africa	Design (Conceptual) ^[2]		
	Last Energy	20	PWR	Last Energy	United States	Design (Conceptual) ^[19]		
1	MCSFR	50-1000	MCSFR	Elysium Industries	United States	Design (Conceptual)		
ŀ	MRX	30–100	PWR	JAERI	Japan	Design (Conceptual)		
l	NP-300	100–300	PWR	Areva TA	France	Design (Conceptual)		
	OPEN100	100	PWR	Energy Impact Center	United States	Design (Conceptual) ^[25]		
	TEPLATOR	50 (non- electric)	PWR (heavy water)	University of West Bohemia	Czech Republic	Design (Conceptual)		
	TMSR-500	500	MSR	ThorCon ^[45]	Indonesia	Design (Conceptual)		
ı	Xe-100	80	HTGR	X-energy ^[52]	United States	Design (Conceptual)		
	IRIS	335	PWR	Westinghouse-led	International	Design (Basic)		
	i-SMR	170	PWR	Innovative Small Modular Reactor Development Agency (KHNP and KAERI)	South Korea	Design (Basic)		
	SEALER ^{[32][33]}	55	LFR	Blykalla [sv]	Sweden	Design		
	MMR	5-15	HTGR	Ultra Safe Nuclear Corporation [d] purchased by NANO Nuclear Energy	United States/ Canada	Company filed for Chapter 11 bankruptcy. [20] Had been seeking licensing[21] Design acquired by Nano Nuclear Energy.[22]		
	SMR-160	160	PWR	Holtec International	United States	US NRC pre-application suspended in favor of SMR-300 design ^[39]		
	Westinghouse SMR	225	PWR	Westinghouse Electric Company	United States	Cancelled. Preliminary design completed. [51]		
	U-Battery	4	HTGR	U-Battery consortium ^[b]	United Kingdom	Cancelled. Design archived. ^[47]		
	PBMR-400	165	HTGR	Eskom	South Africa	Cancelled - demonstration plant postponed indefinitely ^[26]		
	B&W mPower	195	PWR	Babcock & Wilcox	United States	Cancelled		

PWR = Pressurized Water Reactor SFR = Sodium Cooled Fast Reactor HPR = Heat Pipe Reactor F = Fast = Using fast / unmoderated Neutrons BWR = Boiling Water Reactor MSR = Molten Salt Reactor

FBR = Fast Breeder Reactor
GTHMR = Gas Turbine Helium Modular Reactor
HTGR = High Temperature Gas Cooled Fast Reactor

LFR = Lead Cooled Fast Reactor MCSFR = Molten Chloride Salt Fast Reactor

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