

RM641-CS

CM238
QM175

9th/8th Gen Intel® Core™
Modular-Designed Embedded System

KEY FEATURES



High Performance CPU

9th/8th Gen Intel Core Rackmount 4U Box PC



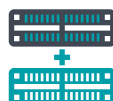
Server Application

Designed for industrial server application



Multiple Storage

Up to 1 x 3.5"/2.5" SATA drive bay and 3 x optical drive bays



Scalability

1 PCIe x16, 3 PCIe x4, 2 PCI, 1 Mini PCIe



Reliability

Industrial grade components



PANEL

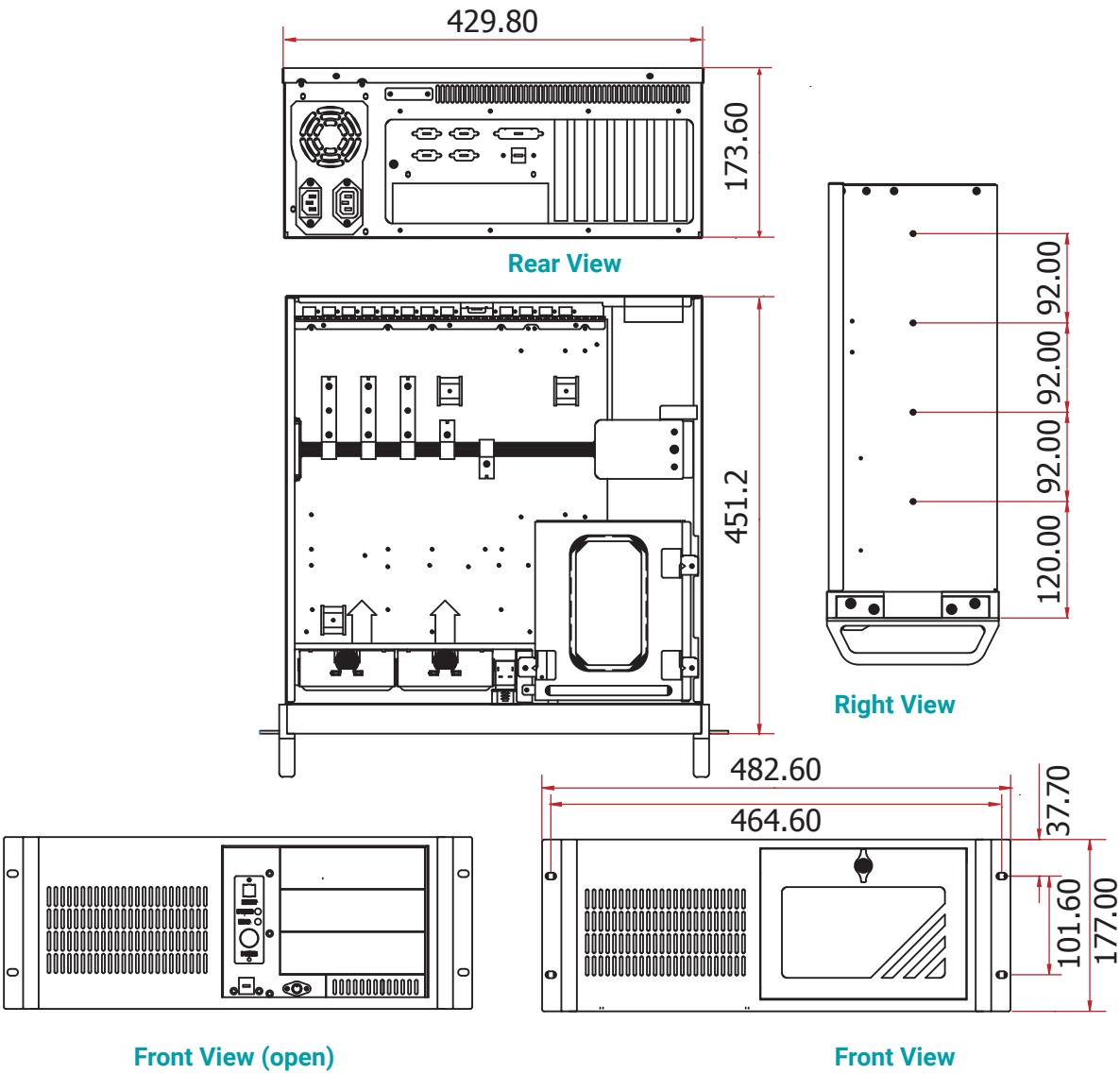


Front View



Bottom View

DIMENSIONS



SPECIFICATION

SYSTEM	Processor	9th/8th Generation Intel® Core™ /Pentium®/Celeron® LGA 1151 Socket Processors: Intel® Core™, Xeon®, i7/i5/i3, Pentium® and Celeron®, TDP up to 80W
	Chipset	Intel® C246 Chipset
	Memory	Four 288-pin DIMM up to 128GB Dual Channel DDR4 2400/2666MHz (ECC/non ECC)
	BIOS	Insyde SPI 128Mbit
GRAPHICS	Controller	Intel® HD Gen 9 Graphics
	Feature	OpenGL 5.0, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9 HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9
	Display	1 x VGA 2 x DP++ VGA: resolution up to 1920x1200@60Hz DP++: resolution up to 4096x2160@60Hz
	Triple Displays	VGA + 2 x DP++
STORAGE	External	3 x 5.25" Optical drive bays (Front Accessible) 1 x 3.5" SATA 3.0 drive bay (Front Accessible)
EXPANSION	Interface	1 x PCIe x16 (Gen 3) (x8/x8 signals as opt., MOQ required) 3 x PCIe x4 (Gen 3) 2 x PCI 1 x Mini PCIe (PCIe/mSATA, share w/SATA conn. as opt./USB2.0) 1 x M.2 2242/2280 M key (PCIe x4 NVMe, Intel optane memory support)
AUDIO	Audio Codec	Realtek ALC887 (ALC888 as opt.)
	Interface	1 x Line-in (available upon request) 1 x Line-out 1 x Mic-in
ETHERNET	Controller	1 x Intel® I211AT PCIe (10/100/1000Mbps) 1 x Intel® I219LM PCIe with iAMT12.0 (10/100/1000Mbps) (only Xeon/Core i7/i5 supports iAMT)
LED	Indicators	1 x Power LED 1 x HDD LED
FRONT I/O	USB	2 x USB 2.0 (available upon request)
	Buttons	1 x Power switch 1 x Reset switch
REAR I/O	Ethernet	2 x GbE (RJ-45)
	Serial	1 x RS-232/422/485 (RS-232 w/ power) (DB-9)
	USB	4 x USB 3.1 Gen1 2 x USB 2.0
	Display	1 x VGA 2 x DP++
	Audio	1 x Line-in (available upon request) 1 x Line-out 1 x Mic-in
	PS/2	1 x PS/2 (mini-DIN-6)
	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
WATCHDOG TIMER	Supply	ATX PS/2 power supply 500W AC power input : 90~264V
COOLING	Fan	2 x 92cm System fan with quick access filter
OS SUPPORT	Microsoft	Windows 10 IoT Enterprise 64-bit
	Linux	Linux
ENVIRONMENT	Operating Temperature	0 to 45°C
	Storage Temperature	-20 to 60°C
	Relative Humidity	0 to 90% RH (non-condensing)
MECHANICAL	Construction	SECC
	Mounting	Flexible hold down bar
	Dimensions(W x H x D)	483 x 177 x 451mm
	Weight	14.3kg
STANDARDS AND CERTIFICATIONS	Shock	Operating: 3G Non-operating: 5G
	Vibration	Operating: random 5~500Hz 1G Non-operating: sweep sine 10~500Hz 1.5G
	Package Drop	ISTA Project 1A
	Certification	CE, FCC, RoHS, UKCA