

Table of Contents – Data Center Physical Infrastructure

Page No.

Executive Summary

Introduction & Significant Changes.....	1
Overview	1
Definitions	5
Vendor Product Maps	9
Methodology.....	10

Worldwide Tables (Mfg. Revenue, Units, Mfg. ASP)

Table 1: Worldwide Data Center Physical Infrastructure Market – Total	1
Table 2: Regional Data Center Physical Infrastructure Market – Total	2
Table 3: North America – Data Center Physical Infrastructure Market – Total.....	3
Table 4: EMEA – Data Center Physical Infrastructure Market – Total	4
Table 5: China – Data Center Physical Infrastructure Market – Total	5
Table 6: Asia Pacific (Excluding China) – Data Center Physical Infrastructure Market – Total.....	6
Table 7: CALA – Data Center Physical Infrastructure Market – Total.....	7
Table 8: Worldwide UPS Market – Total – By Power Rating	8
Table 9: North America – UPS Market – Total – By Power Rating	10
Table 10: EMEA – UPS Market – Total – By Power Rating.....	12
Table 11: China – UPS Market – Total – By Power Rating.....	14
Table 12: Asia Pacific (Excluding China) – UPS Market – Total – By Power Rating	16
Table 13: CALA – UPS Market – Total – By Power Rating	18
Table 14: Worldwide Thermal Management Market – Total – By Product Type.....	20
Table 15: Worldwide Thermal Management Market – By Heat Rejection.....	21
Table 16: North America – Thermal Management Market – Total – By Product Type.....	22
Table 17: North America – Thermal Management Market – By Heat Rejection.....	23
Table 18: EMEA – Thermal Management Market – Total – By Product Type	24
Table 19: EMEA – Thermal Management Market – By Heat Rejection	25
Table 20: China – Thermal Management Market – Total – By Product Type	26
Table 21: China – Thermal Management Market – By Heat Rejection	27
Table 22: Asia Pacific (Excluding China) – Thermal Management Market – Total – By Product Type.....	28
Table 23: Asia Pacific (Excluding China) – Thermal Management Market – By Heat Rejection	29
Table 24: CALA – Thermal Management Market – Total – By Product Type.....	30
Table 25: CALA – Thermal Management Market – By Heat Rejection.....	31
Table 26: Worldwide Cabinet Power Distribution and Busway Market – Total – By Product Type.....	32
Table 27: North America – Cabinet Power Distribution and Busway Market – By Product Type	33
Table 28: EMEA – Cabinet Power Distribution and Busway Market – By Product Type.....	34
Table 29: China – Cabinet Power Distribution and Busway Market – By Product Type	35
Table 30: Asia Pacific (Excluding China) – Cabinet Power Distribution and Busway Market – By Product Type	36
Table 31: CALA – Cabinet Power Distribution and Busway Market – By Product Type	37
Table 32: Worldwide Rack Power Distribution Market – Total – By Product Type	38
Table 33: North America – Rack Power Distribution Market – By Product Type.....	39
Table 34: EMEA – Rack Power Distribution Market – By Product Type	40
Table 35: China – Rack Power Distribution Market – By Product Type	41
Table 36: Asia Pacific (Excluding China) – Rack Power Distribution Market – By Product Type.....	42
Table 37: CALA – Rack Power Distribution Market – By Product Type.....	43
Table 38: Worldwide IT Racks and Containment Market – Total – By Product Type	44
Table 39: North America – IT Racks and Containment Market – By Product Type	46
Table 40: EMEA – IT Racks and Containment Market – By Product Type	48
Table 41: China – IT Racks and Containment Market – By Product Type.....	50
Table 42: Asia Pacific (Excluding China) – IT Racks and Containment Market – By Product Type.....	52
Table 43: CALA – IT Racks and Containment Market – By Product Type	54
Table 44: Worldwide Software and Services Market – Total – By Service Type.....	56

Table of Contents – Data Center Physical Infrastructure

	Page No.
Table 45: North America – Software and Services Market – By Service Type	57
Table 46: EMEA – Software and Services Market – By Service Type.....	58
Table 47: China – Software and Services Market – By Service Type	59
Table 48: Asia Pacific (Excluding China) – Software and Services Market – By Service Type	60
Table 49: CALA – Software and Services Market – By Service Type	61
Table 50: Worldwide Data Center Physical Infrastructure Market – Total – By Customer Segment	62
Table 51: North America – Data Center Physical Infrastructure Market – By Customer Segment	63
Table 52: EMEA – Data Center Physical Infrastructure Market – By Customer Segment	64
Table 53: China – Data Center Physical Infrastructure Market – By Customer Segment.....	65
Table 54: Asia Pacific (Excluding China) – Data Center Physical Infrastructure Market – By Customer Segment.....	66
Table 55: CALA – Data Center Physical Infrastructure Market – By Customer Segment	67
 Vendor Tables	
 Data Center Physical Infrastructure – Total	
Worldwide – Data Center Physical Infrastructure – Total – Mfg. Revenue.....	68
North America – Data Center Physical Infrastructure – Mfg. Revenue.....	69
EMEA – Data Center Physical Infrastructure – Mfg. Revenue	70
China – Data Center Physical Infrastructure – Mfg. Revenue	71
Asia Pacific (Excluding China) – Data Center Physical Infrastructure – Mfg. Revenue	72
CALA – Data Center Physical Infrastructure – Mfg. Revenue	73
 UPS – Total	
Worldwide – UPS – Total – Mfg. Revenue	74
Worldwide – UPS – Single-Phase – Mfg. Revenue.....	75
Worldwide – UPS – ≤1 kVA – Mfg. Revenue.....	76
Worldwide – UPS – 1.01 – 5 kVA – Mfg. Revenue	77
Worldwide – UPS – >5 kVA – Mfg. Revenue.....	78
Worldwide – UPS – Three-Phase – Mfg. Revenue.....	79
Worldwide – UPS – ≤20 kVA – Mfg. Revenue.....	80
Worldwide – UPS – 20.1 – 250 kVA – Mfg. Revenue	81
Worldwide – UPS – 251 – 800 kVA – Mfg. Revenue	82
Worldwide – UPS – 801 – 1200 kVA – Mfg. Revenue	83
Worldwide – UPS – 1201 – 2000 kVA – Mfg. Revenue	84
Worldwide – UPS – >2000 kVA – Mfg. Revenue.....	85
 Thermal Management – Total	
Worldwide – Thermal Management – Total – Mfg. Revenue	86
Worldwide – Thermal Management – AHU – Mfg. Revenue	87
Worldwide – Thermal Management – Direct Liquid – Mfg. Revenue	88
Worldwide – Thermal Management – Immersion – Mfg. Revenue.....	89
Worldwide – Thermal Management – Perimeter (Room) – Mfg. Revenue	90
Worldwide – Thermal Management – Rack & Row – Mfg. Revenue	91
Worldwide – Thermal Management – RDHx – Mfg. Revenue.....	92
Worldwide – Thermal Management – Wall & Ceiling Mount (Room) – Mfg. Revenue.....	93
Worldwide – Thermal Management – Chillers – Mfg. Revenue	94
 Power Distribution – Total	
Worldwide – Power Distribution – Total – Mfg. Revenue	95
Worldwide – Power Distribution – Cabinet PDU and Busway – Mfg. Revenue	96
Worldwide – Power Distribution – Rack PDU – Mfg. Revenue.....	97

Table of Contents – Data Center Physical Infrastructure

	Page No.
IT Racks & Containment – Total	
Worldwide – IT Racks & Containment – Total – Mfg. Revenue.....	98
Worldwide – IT Racks & Containment – IT Racks – Mfg. Revenue.....	99
Worldwide – IT Racks & Containment – Wall Mount Enclosures – Mfg. Revenue	100
Worldwide – IT Racks & Containment – Containment – Mfg. Revenue.....	101
Software & Services – Total	
Worldwide – Software & Services – Total – Mfg. Revenue.....	102
Worldwide – Software & Services – UPS Services – Mfg. Revenue	103
Worldwide – Software & Services – Thermal Management Services – Mfg. Revenue.....	104
Worldwide – Software & Services – Digital Services – Mfg. Revenue.....	105
UPS – North America	
North America – UPS – Total – Mfg. Revenue	106
North America – UPS – Single-Phase – Mfg. Revenue	107
North America – UPS – ≤1 kVA – Mfg. Revenue.....	108
North America – UPS – 1.01 – 5 kVA – Mfg. Revenue	109
North America – UPS – >5 kVA – Mfg. Revenue.....	110
North America – UPS – Three-Phase – Mfg. Revenue.....	111
North America – UPS – ≤20 kVA – Mfg. Revenue.....	112
North America – UPS – 20.1 – 250 kVA – Mfg. Revenue	113
North America – UPS – 251 – 800 kVA – Mfg. Revenue	114
North America – UPS – 801 – 1200 kVA – Mfg. Revenue	115
North America – UPS – 1201 – 2000 kVA – Mfg. Revenue	116
North America – UPS – >2000 kVA – Mfg. Revenue.....	117
Thermal Management – North America	
North America – Thermal Management – Total – Mfg. Revenue	118
North America – Thermal Management – AHU – Mfg. Revenue	119
North America – Thermal Management – Direct Liquid – Mfg. Revenue	120
North America – Thermal Management – Immersion – Mfg. Revenue.....	121
North America – Thermal Management – Perimeter (Room) – Mfg. Revenue	122
North America – Thermal Management – Rack & Row – Mfg. Revenue	123
North America – Thermal Management – RDHx – Mfg. Revenue	124
North America – Thermal Management – Wall & Ceiling Mount (Room) – Mfg. Revenue.....	125
North America – Thermal Management – Chillers – Mfg. Revenue	126
Power Distribution – North America	
North America – Power Distribution – Total – Mfg. Revenue	127
North America – Power Distribution – Cabinet PDU and Busway – Mfg. Revenue	128
North America – Power Distribution – Rack PDU – Mfg. Revenue.....	129
IT Racks & Containment – North America	
North America – IT Racks & Containment – Total – Mfg. Revenue.....	130
North America – IT Racks & Containment – IT Racks – Mfg. Revenue.....	131
North America – IT Racks & Containment – Wall Mount Enclosures – Mfg. Revenue	132
North America – IT Racks & Containment – Containment – Mfg. Revenue.....	133
Software & Services – North America	
North America – Software & Services – Total – Mfg. Revenue.....	134
North America – Software & Services – UPS Services – Mfg. Revenue	135
North America – Software & Services – Thermal Management Services – Mfg. Revenue.....	136
North America – Software & Services – Digital Services – Mfg. Revenue.....	137

Table of Contents – Data Center Physical Infrastructure

	Page No.
UPS – EMEA	
EMEA – UPS – Total – Mfg. Revenue.....	138
EMEA – UPS – Single-Phase – Mfg. Revenue	139
EMEA – UPS – ≤1 kVA – Mfg. Revenue	140
EMEA – UPS – 1.01 – 5 kVA – Mfg. Revenue.....	141
EMEA – UPS – >5 kVA – Mfg. Revenue	142
EMEA – UPS – Three-Phase – Mfg. Revenue	143
EMEA – UPS – ≤20 kVA – Mfg. Revenue	144
EMEA – UPS – 20.1 – 250 kVA – Mfg. Revenue.....	145
EMEA – UPS – 251 – 800 kVA – Mfg. Revenue.....	146
EMEA – UPS – 801 – 1200 kVA – Mfg. Revenue.....	147
EMEA – UPS – 1201 – 2000 kVA – Mfg. Revenue.....	148
EMEA – UPS – >2000 kVA – Mfg. Revenue	149
Thermal Management – EMEA	
EMEA – Thermal Management – Total – Mfg. Revenue	150
EMEA – Thermal Management – AHU – Mfg. Revenue	151
EMEA – Thermal Management – Direct Liquid – Mfg. Revenue	152
EMEA – Thermal Management – Immersion – Mfg. Revenue	153
EMEA – Thermal Management – Perimeter (Room) – Mfg. Revenue.....	154
EMEA – Thermal Management – Rack & Row – Mfg. Revenue.....	155
EMEA – Thermal Management – RDHx – Mfg. Revenue	156
EMEA – Thermal Management – Wall & Ceiling Mount (Room) – Mfg. Revenue	157
EMEA – Thermal Management – Chillers – Mfg. Revenue.....	158
Power Distribution – EMEA	
EMEA – Power Distribution – Total – Mfg. Revenue.....	159
EMEA – Power Distribution – Cabinet PDU and Busway – Mfg. Revenue.....	160
EMEA – Power Distribution – Rack PDU – Mfg. Revenue	161
IT Racks & Containment – EMEA	
EMEA – IT Racks & Containment – Total – Mfg. Revenue	162
EMEA – IT Racks & Containment – IT Racks – Mfg. Revenue	163
EMEA – IT Racks & Containment – Wall Mount Enclosures – Mfg. Revenue	164
EMEA – IT Racks & Containment – Containment – Mfg. Revenue	165
Software & Services – EMEA	
EMEA – Software & Services – Total – Mfg. Revenue	166
EMEA – Software & Services – UPS Services – Mfg. Revenue	167
EMEA – Software & Services – Thermal Management Services – Mfg. Revenue	168
EMEA – Software & Services – Digital Services – Mfg. Revenue	169
UPS – China	
China – UPS – Total – Mfg. Revenue.....	170
China – UPS – Single-Phase – Mfg. Revenue	171
China – UPS – ≤1 kVA – Mfg. Revenue	172
China – UPS – 1.01 – 5 kVA – Mfg. Revenue	173
China – UPS – >5 kVA – Mfg. Revenue	174
China – UPS – Three-Phase – Mfg. Revenue	175
China – UPS – ≤20 kVA – Mfg. Revenue	176
China – UPS – 20.1 – 250 kVA – Mfg. Revenue	177
China – UPS – 251 – 800 kVA – Mfg. Revenue	178
China – UPS – 801 – 1200 kVA – Mfg. Revenue	179

Table of Contents – Data Center Physical Infrastructure

	Page No.
China – UPS – 1201 – 2000 kVA – Mfg. Revenue	180
China – UPS – >2000 kVA – Mfg. Revenue	181
Thermal Management – China	
China – Thermal Management – Total – Mfg. Revenue	182
China – Thermal Management – AHU – Mfg. Revenue	183
China – Thermal Management – Direct Liquid – Mfg. Revenue	184
China – Thermal Management – Immersion – Mfg. Revenue	185
China – Thermal Management – Perimeter (Room) – Mfg. Revenue	186
China – Thermal Management – Rack & Row – Mfg. Revenue	187
China – Thermal Management – RDHx – Mfg. Revenue	188
China – Thermal Management – Wall & Ceiling Mount (Room) – Mfg. Revenue	189
China – Thermal Management – Chillers – Mfg. Revenue	190
Power Distribution – China	
China – Power Distribution – Total – Mfg. Revenue	191
China – Power Distribution – Cabinet PDU and Busway – Mfg. Revenue	192
China – Power Distribution – Rack PDU – Mfg. Revenue	193
IT Racks & Containment – China	
China – IT Racks & Containment – Total – Mfg. Revenue	194
China – IT Racks & Containment – IT Racks – Mfg. Revenue	195
China – IT Racks & Containment – Wall Mount Enclosures – Mfg. Revenue	196
China – IT Racks & Containment – Containment – Mfg. Revenue	197
Software & Services – China	
China – Software & Services – Total – Mfg. Revenue	198
China – Software & Services – UPS Services – Mfg. Revenue	199
China – Software & Services – Thermal Management Services – Mfg. Revenue	200
China – Software & Services – Digital Services – Mfg. Revenue	201
UPS – Asia Pacific (Excluding China)	
APAC (Ex. China) – UPS – Total – Mfg. Revenue	202
APAC (Ex. China) – UPS – Single-Phase – Mfg. Revenue	203
APAC (Ex. China) – UPS – ≤1 kVA – Mfg. Revenue	204
APAC (Ex. China) – UPS – 1.01 – 5 kVA – Mfg. Revenue	205
APAC (Ex. China) – UPS – >5 kVA – Mfg. Revenue	206
APAC (Ex. China) – UPS – Three-Phase – Mfg. Revenue	207
APAC (Ex. China) – UPS – ≤20 kVA – Mfg. Revenue	208
APAC (Ex. China) – UPS – 20.1 – 250 kVA – Mfg. Revenue	209
APAC (Ex. China) – UPS – 251 – 800 kVA – Mfg. Revenue	210
APAC (Ex. China) – UPS – 801 – 1200 kVA – Mfg. Revenue	211
APAC (Ex. China) – UPS – 1201 – 2000 kVA – Mfg. Revenue	212
APAC (Ex. China) – UPS – >2000 kVA – Mfg. Revenue	213
Thermal Management – Asia Pacific (Excluding China)	
APAC (Ex. China) – Thermal Management – Total – Mfg. Revenue	214
APAC (Ex. China) – Thermal Management – AHU – Mfg. Revenue	215
APAC (Ex. China) – Thermal Management – Direct Liquid – Mfg. Revenue	216
APAC (Ex. China) – Thermal Management – Immersion – Mfg. Revenue	217
APAC (Ex. China) – Thermal Management – Perimeter (Room) – Mfg. Revenue	218
APAC (Ex. China) – Thermal Management – Rack & Row – Mfg. Revenue	219
APAC (Ex. China) – Thermal Management – RDHx – Mfg. Revenue	220

Table of Contents – Data Center Physical Infrastructure

	Page No.
APAC (Ex. China) – Thermal Management – Wall & Ceiling Mount (Room) – Mfg. Revenue	221
APAC (Ex. China) – Thermal Management – Chillers – Mfg. Revenue	222
Power Distribution – Asia Pacific (Excluding China)	
APAC (Ex. China) – Power Distribution – Total – Mfg. Revenue	223
APAC (Ex. China) – Power Distribution – Cabinet PDU and Busway – Mfg. Revenue	224
APAC (Ex. China) – Power Distribution – Rack PDU – Mfg. Revenue	225
IT Racks & Containment – Asia Pacific (Excluding China)	
APAC (Ex. China) – IT Racks & Containment – Total – Mfg. Revenue	226
APAC (Ex. China) – IT Racks & Containment – IT Racks – Mfg. Revenue	227
APAC (Ex. China) – IT Racks & Containment – Wall Mount Enclosures – Mfg. Revenue	228
APAC (Ex. China) – IT Racks & Containment – Containment – Mfg. Revenue	229
Software & Services – Total	
APAC (Ex. China) – Software & Services – Total – Mfg. Revenue.....	230
APAC (Ex. China) – Software & Services – UPS Services – Mfg. Revenue	231
APAC (Ex. China) – Software & Services – Thermal Management Services – Mfg. Revenue.....	232
APAC (Ex. China) – Software & Services – Digital Services – Mfg. Revenue.....	233
UPS – CALA	
North America – UPS – Total – Mfg. Revenue	234
North America – UPS – Single-Phase – Mfg. Revenue	235
North America – UPS – ≤1 kVA – Mfg. Revenue.....	236
North America – UPS – 1.01 – 5 kVA – Mfg. Revenue	237
North America – UPS – >5 kVA – Mfg. Revenue.....	238
North America – UPS – Three-Phase – Mfg. Revenue.....	239
North America – UPS – ≤20 kVA – Mfg. Revenue.....	240
North America – UPS – 20.1 – 250 kVA – Mfg. Revenue	241
North America – UPS – 251 – 800 kVA – Mfg. Revenue	242
North America – UPS – 801 – 1200 kVA – Mfg. Revenue	243
North America – UPS – 1201 – 2000 kVA – Mfg. Revenue	244
North America – UPS – >2000 kVA – Mfg. Revenue.....	245
Thermal Management – CALA	
CALA – Thermal Management – Total – Mfg. Revenue	246
CALA – Thermal Management – AHU – Mfg. Revenue	247
CALA – Thermal Management – Direct Liquid – Mfg. Revenue	248
CALA – Thermal Management – Immersion – Mfg. Revenue.....	249
CALA – Thermal Management – Perimeter (Room) – Mfg. Revenue	250
CALA – Thermal Management – Rack & Row – Mfg. Revenue	251
CALA – Thermal Management – RDHx – Mfg. Revenue	252
CALA – Thermal Management – Wall & Ceiling Mount (Room) – Mfg. Revenue.....	253
CALA – Thermal Management – Chillers – Mfg. Revenue	254
Power Distribution – CALA	
CALA – Power Distribution – Total – Mfg. Revenue	255
CALA – Power Distribution – Cabinet PDU and Busway – Mfg. Revenue	256
CALA – Power Distribution – Rack PDU – Mfg. Revenue.....	257
IT Racks & Containment – CALA	
CALA – IT Racks & Containment – Total – Mfg. Revenue.....	258
CALA – IT Racks & Containment – IT Racks – Mfg. Revenue.....	259

Table of Contents – Data Center Physical Infrastructure

	Page No.
CALA – IT Racks & Containment – Wall Mount Enclosures – Mfg. Revenue	260
CALA – IT Racks & Containment – Containment – Mfg. Revenue.....	261
 Software & Services – CALA	
CALA – Software & Services – Total – Mfg. Revenue.....	262
CALA – Software & Services – UPS Services – Mfg. Revenue	263
CALA – Software & Services – Thermal Management Services – Mfg. Revenue.....	264
CALA – Software & Services – Digital Services – Mfg. Revenue.....	265