

PACKAGING OPTIMIZATION REPORT

Calculation summary from 19.09.2026 11:44

PRODUCTS 12	BOX SIZES 3	AVERAGE, PACKAGING / M ³ 1327,52 \$
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Calculation parameters

Criterion: Cost / m ³	Clearances L/W: 1,0 / 1,0 mm
Dimension deviation: -50,0 ... 100,0 %	Pallet: 1200 × 800 mm; height: 1800 mm

Standardized boxes

Group	External dimensions, mm	Products	Average cost / m ³
1	433,4 × 208,0 × 384,0	6	1243,84 \$
2	599,5 × 205,0 × 278,8	1	906,37 \$
3	355,0 × 165,0 × 300,0	5	1512,18 \$

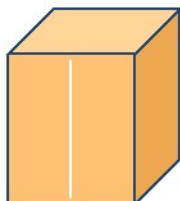
Product allocation

Product	Group	Pack, mm	Box, mm	Packaging / m ³
4	1	79,0 × 67,5 × 93,8	433,4 × 208,0 × 384,0	1482,41 \$
5	1	89,5 × 71,0 × 110,2	433,4 × 208,0 × 384,0	1215,43 \$
7	1	100,5 × 85,0 × 117,1	433,4 × 208,0 × 384,0	1196,61 \$
9	1	126,0 × 100,5 × 142,1	433,4 × 208,0 × 384,0	870,75 \$
10	1	81,5 × 66,0 × 93,0	433,4 × 208,0 × 384,0	1482,52 \$
14	1	90,0 × 71,0 × 109,5	433,4 × 208,0 × 384,0	1215,31 \$
8	2	118,5 × 99,0 × 136,4	599,5 × 205,0 × 278,8	906,37 \$
0	3	69,0 × 54,0 × 80,5	355,0 × 165,0 × 300,0	1741,45 \$
1	3	68,5 × 55,0 × 79,6	355,0 × 165,0 × 300,0	1741,01 \$
2	3	77,0 × 58,0 × 89,6	355,0 × 165,0 × 300,0	1473,01 \$
3	3	78,0 × 58,0 × 88,4	355,0 × 165,0 × 300,0	1473,01 \$
6	3	98,0 × 79,0 × 116,0	355,0 × 165,0 × 300,0	1132,39 \$

PRODUCT: 4

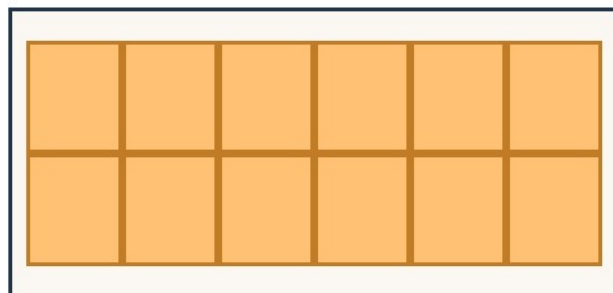
Unification group 1 · Box 433,4 × 208,0 × 384,0 mm

3D pack model



79,0 × 67,5 × 93,8 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 79,0 × 67,5 × 93,8 mm

Layout: 6 × 2 × 3, B-L-H

Packs per box: 36

Product weight per pack: 100,0 g

Pack blank area: 0,0486 m²

Pack volume: 0,5000 dm³

Pack cost: 0,49 \$

Volume change: 17,6 %

Box: 433,4 × 208,0 × 384,0 mm

Gross weight: 4,011 kg

Box blank area: 0,7664 m²

Box cost: 9,20 \$

On pallet: 24 (6 × 4)

Pallet utilization: 48,1 %

Packaging / unit: 0,74 \$

Packaging / m³: 1482,41 \$

ORIGINAL OPTION

Pack: 86,0 × 43,0 × 115,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 27

Gross weight: 3,056 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 0,78 \$

Packaging / m³: 1823,14 \$

Saving: 18,7 %

COMPARISON WITH POYAS

POYAS pack: 76,5 × 47,9 × 112,0 mm

POYAS box (inner): 336,0 × 154,0 × 336,0 mm

Packs per POYAS box: 42

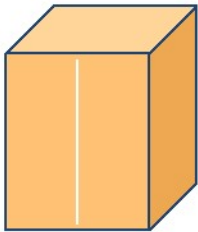
POYAS packaging / m³: 1436,18 \$

packsize packaging / m³: 1482,41 \$

PRODUCT: 5

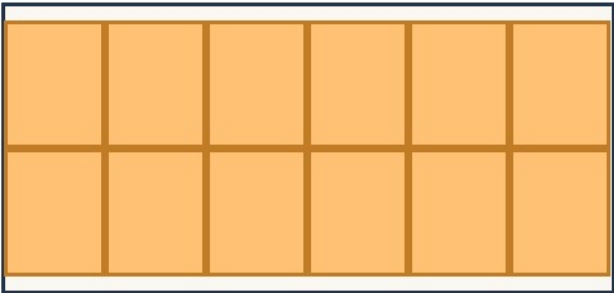
Unification group 1 · Box 433,4 × 208,0 × 384,0 mm

3D pack model



89,5 × 71,0 × 110,2 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 89,5 × 71,0 × 110,2 mm
Layout: 6 × 2 × 3, B-L-H
Packs per box: 36
Product weight per pack: 100,0 g
Pack blank area: 0,0595 m²
Pack volume: 0,7000 dm³
Pack cost: 0,60 \$
Volume change: 22,1 %
Box: 433,4 × 208,0 × 384,0 mm
Gross weight: 4,035 kg
Box blank area: 0,7664 m²
Box cost: 9,20 \$
On pallet: 24 (6 × 4)
Pallet utilization: 48,1 %
Packaging / unit: 0,85 \$
Packaging / m³: 1215,43 \$

ORIGINAL OPTION

Pack: 91,0 × 46,0 × 137,0 mm
Box: 400,0 × 300,0 × 200,0 mm
Packs per box: 24
Gross weight: 2,762 kg
Box blank area: 0,7040 m²
Box cost: 8,45 \$
On pallet: 72 boxes
Packaging / unit: 0,91 \$
Packaging / m³: 1589,72 \$

Saving: 23,5 %

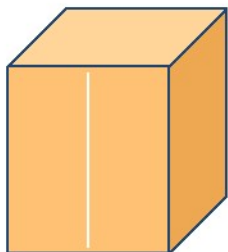
COMPARISON WITH POYAS

POYAS pack: 93,0 × 52,8 × 106,0 mm
POYAS box (inner): 212,0 × 94,0 × 212,0 mm
Packs per POYAS box: 8
POYAS packaging / m³: 1571,23 \$
packsize packaging / m³: 1215,43 \$

PRODUCT: 7

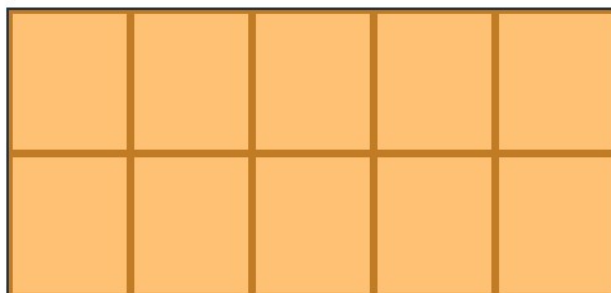
Unification group 1 · Box 433,4 × 208,0 × 384,0 mm

3D pack model



100,5 × 85,0 × 117,1 mm

Pack layout in the box



5 × 2 per layer; layers: 2; total: 20

OPTIMAL OPTION

Pack: 100,5 × 85,0 × 117,1 mm

Layout: 5 × 2 × 2, B-L-H

Packs per box: 20

Product weight per pack: 200,0 g

Pack blank area: 0,0737 m²

Pack volume: 1,0000 dm³

Pack cost: 0,74 \$

Volume change: 20,5 %

Box: 433,4 × 208,0 × 384,0 mm

Gross weight: 4,395 kg

Box blank area: 0,7664 m²

Box cost: 9,20 \$

On pallet: 24 (6 × 4)

Pallet utilization: 48,1 %

Packaging / unit: 1,20 \$

Packaging / m³: 1196,61 \$

ORIGINAL OPTION

Pack: 103,0 × 52,0 × 155,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 15

Gross weight: 3,345 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 1,26 \$

Packaging / m³: 1523,26 \$

Saving: 21,4 %

COMPARISON WITH POYAS

POYAS pack: 97,7 × 58,8 × 153,0 mm

POYAS box (inner): 294,0 × 154,0 × 294,0 mm

Packs per POYAS box: 15

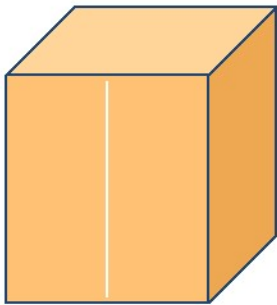
POYAS packaging / m³: 1199,09 \$

packsize packaging / m³: 1196,61 \$

PRODUCT: 9

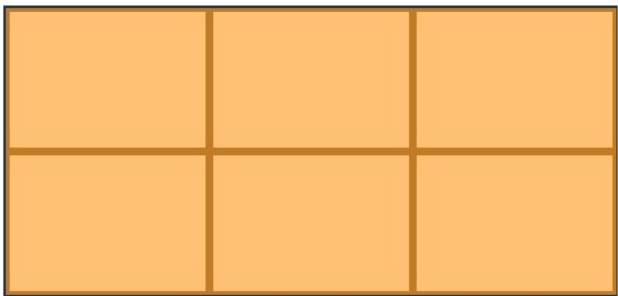
Unification group 1 · Box 433,4 × 208,0 × 384,0 mm

3D pack model



126,0 × 100,5 × 142,1 mm

Pack layout in the box



3 × 2 per layer; layers: 3; total: 18

OPTIMAL OPTION

Pack: 126,0 × 100,5 × 142,1 mm

Layout: 3 × 2 × 3, H-B-L

Packs per box: 18

Product weight per pack: 250,0 g

Pack blank area: 0,1056 m²

Pack volume: 1,8000 dm³

Pack cost: 1,06 \$

Volume change: 20,0 %

Box: 433,4 × 208,0 × 384,0 mm

Gross weight: 4,921 kg

Box blank area: 0,7664 m²

Box cost: 9,20 \$

On pallet: 24 (6 × 4)

Pallet utilization: 48,1 %

Packaging / unit: 1,57 \$

Packaging / m³: 870,75 \$

ORIGINAL OPTION

Pack: 126,0 × 63,0 × 189,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 12

Gross weight: 3,354 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 1,72 \$

Packaging / m³: 1143,61 \$

Saving: 23,9 %

COMPARISON WITH POYAS

POYAS pack: 126,0 × 73,3 × 147,0 mm

POYAS box (inner): 294,0 × 127,0 × 294,0 mm

Packs per POYAS box: 8

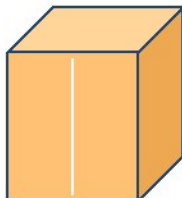
POYAS packaging / m³: 1090,46 \$

packsize packaging / m³: 870,75 \$

PRODUCT: 10

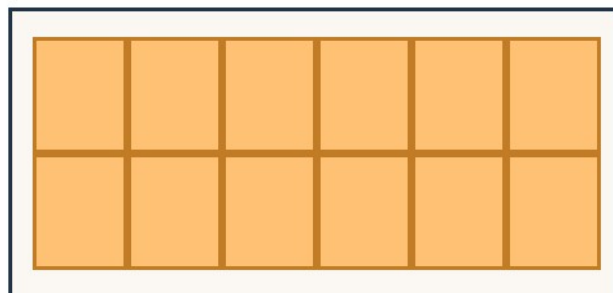
Unification group 1 · Box 433,4 × 208,0 × 384,0 mm

3D pack model



81,5 × 66,0 × 93,0 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 81,5 × 66,0 × 93,0 mm

Layout: 6 × 2 × 3, B-L-H

Packs per box: 36

Product weight per pack: 100,0 g

Pack blank area: 0,0486 m²

Pack volume: 0,5000 dm³

Pack cost: 0,49 \$

Volume change: 14,7 %

Box: 433,4 × 208,0 × 384,0 mm

Gross weight: 4,011 kg

Box blank area: 0,7664 m²

Box cost: 9,20 \$

On pallet: 24 (6 × 4)

Pallet utilization: 48,1 %

Packaging / unit: 0,74 \$

Packaging / m³: 1482,52 \$

ORIGINAL OPTION

Pack: 83,0 × 42,0 × 125,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 28

Gross weight: 3,161 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 0,78 \$

Packaging / m³: 1780,18 \$

Saving: 16,7 %

COMPARISON WITH POYAS

POYAS pack: 76,5 × 47,9 × 112,0 mm

POYAS box (inner): 336,0 × 154,0 × 336,0 mm

Packs per POYAS box: 42

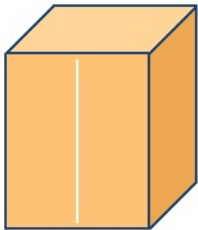
POYAS packaging / m³: 1436,18 \$

packsize packaging / m³: 1482,52 \$

PRODUCT: 14

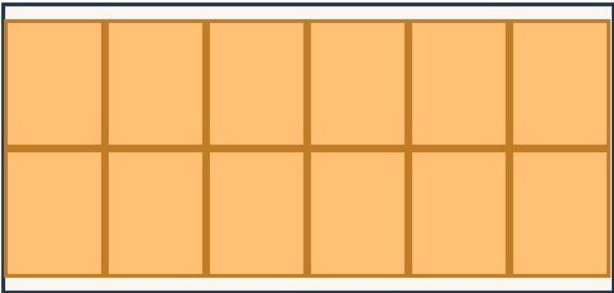
Unification group 1 · Box 433,4 × 208,0 × 384,0 mm

3D pack model



90,0 × 71,0 × 109,5 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 90,0 × 71,0 × 109,5 mm

Layout: 6 × 2 × 3, B-L-H

Packs per box: 36

Product weight per pack: 100,0 g

Pack blank area: 0,0595 m²

Pack volume: 0,7000 dm³

Pack cost: 0,60 \$

Volume change: 20,7 %

Box: 433,4 × 208,0 × 384,0 mm

Gross weight: 4,035 kg

Box blank area: 0,7664 m²

Box cost: 9,20 \$

On pallet: 24 (6 × 4)

Pallet utilization: 48,1 %

Packaging / unit: 0,85 \$

Packaging / m³: 1215,31 \$

ORIGINAL OPTION

Pack: 92,0 × 46,0 × 137,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 24

Gross weight: 2,763 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 0,92 \$

Packaging / m³: 1579,44 \$

Saving: 23,1 %

COMPARISON WITH POYAS

POYAS pack: 93,0 × 52,8 × 106,0 mm

POYAS box (inner): 212,0 × 94,0 × 212,0 mm

Packs per POYAS box: 8

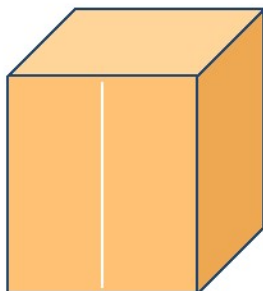
POYAS packaging / m³: 1571,23 \$

packsize packaging / m³: 1215,31 \$

PRODUCT: 8

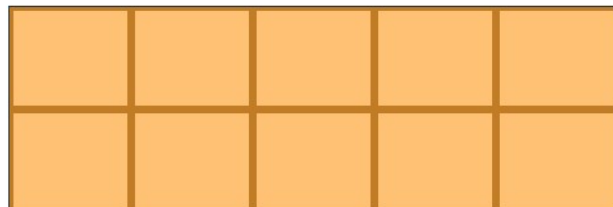
Unification group 2 · Box 599,5 × 205,0 × 278,8 mm

3D pack model



118,5 × 99,0 × 136,4 mm

Pack layout in the box



5 × 2 per layer; layers: 2; total: 20

OPTIMAL OPTION

Pack: 118,5 × 99,0 × 136,4 mm

Layout: 5 × 2 × 2, L-B-H

Packs per box: 20

Product weight per pack: 200,0 g

Pack blank area: 0,0982 m²

Pack volume: 1,6000 dm³

Pack cost: 0,98 \$

Volume change: 21,8 %

Box: 599,5 × 205,0 × 278,8 mm

Gross weight: 4,430 kg

Box blank area: 0,7807 m²

Box cost: 9,37 \$

On pallet: 36 (6 × 6)

Pallet utilization: 71,4 %

Packaging / unit: 1,45 \$

Packaging / m³: 906,37 \$

ORIGINAL OPTION

Pack: 121,0 × 60,0 × 181,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 15

Gross weight: 3,366 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 1,50 \$

Packaging / m³: 1138,59 \$

Saving: 20,4 %

COMPARISON WITH POYAS

POYAS pack: 111,7 × 76,5 × 168,0 mm

POYAS box (inner): 336,0 × 154,0 × 336,0 mm

Packs per POYAS box: 12

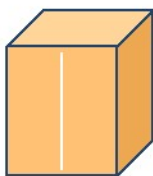
POYAS packaging / m³: 1012,40 \$

packsize packaging / m³: 906,37 \$

PRODUCT: 0

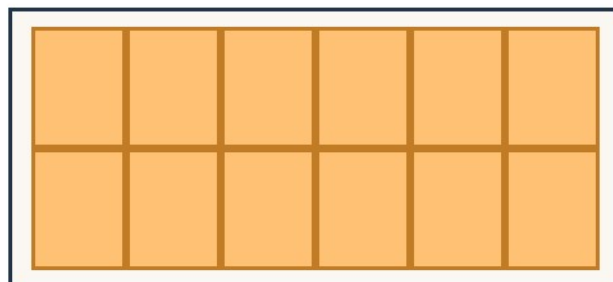
Unification group 3 · Box 355,0 × 165,0 × 300,0 mm

3D pack model



69,0 × 54,0 × 80,5 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 69,0 × 54,0 × 80,5 mm

Layout: 6 × 2 × 3, B-L-H

Packs per box: 36

Product weight per pack: 55,0 g

Pack blank area: 0,0359 m²

Pack volume: 0,3000 dm³

Pack cost: 0,36 \$

Volume change: 20,6 %

Box: 355,0 × 165,0 × 300,0 mm

Gross weight: 2,253 kg

Box blank area: 0,4888 m²

Box cost: 5,87 \$

On pallet: 84 (14 × 6)

Pallet utilization: 85,4 %

Packaging / unit: 0,52 \$

Packaging / m³: 1741,45 \$

ORIGINAL OPTION

Pack: 72,0 × 36,0 × 96,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 88

Gross weight: 5,299 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 0,43 \$

Packaging / m³: 1736,08 \$

Cost increase: 0,3 %

COMPARISON WITH POYAS

POYAS pack: 64,8 × 42,0 × 86,7 mm

POYAS box (inner): 260,0 × 127,0 × 260,0 mm

Packs per POYAS box: 36

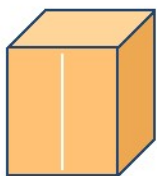
POYAS packaging / m³: 1799,27 \$

packsize packaging / m³: 1741,45 \$

PRODUCT: 1

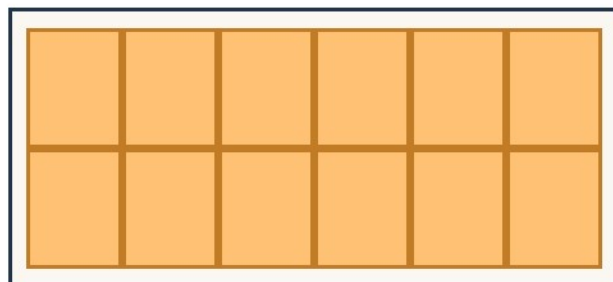
Unification group 3 · Box 355,0 × 165,0 × 300,0 mm

3D pack model



68,5 × 55,0 × 79,6 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 68,5 × 55,0 × 79,6 mm

Layout: 6 × 2 × 3, B-L-H

Packs per box: 36

Product weight per pack: 50,0 g

Pack blank area: 0,0359 m²

Pack volume: 0,3000 dm³

Pack cost: 0,36 \$

Volume change: 39,0 %

Box: 355,0 × 165,0 × 300,0 mm

Gross weight: 2,073 kg

Box blank area: 0,4888 m²

Box cost: 5,87 \$

On pallet: 84 (14 × 6)

Pallet utilization: 85,4 %

Packaging / unit: 0,52 \$

Packaging / m³: 1741,01 \$

ORIGINAL OPTION

Pack: 69,0 × 34,0 × 92,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 88

Gross weight: 4,845 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 0,41 \$

Packaging / m³: 1879,39 \$

Saving: 7,4 %

COMPARISON WITH POYAS

POYAS pack: 67,0 × 38,3 × 84,0 mm

POYAS box (inner): 336,0 × 154,0 × 336,0 mm

Packs per POYAS box: 80

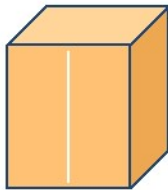
POYAS packaging / m³: 1759,79 \$

packsize packaging / m³: 1741,01 \$

PRODUCT: 2

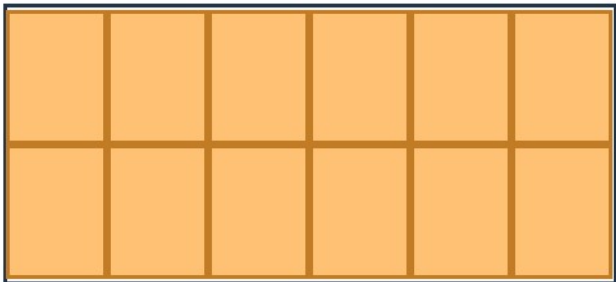
Unification group 3 · Box 355,0 × 165,0 × 300,0 mm

3D pack model



77,0 × 58,0 × 89,6 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 77,0 × 58,0 × 89,6 mm

Layout: 6 × 2 × 3, B-L-H

Packs per box: 36

Product weight per pack: 100,0 g

Pack blank area: 0,0426 m²

Pack volume: 0,4000 dm³

Pack cost: 0,43 \$

Volume change: 37,1 %

Box: 355,0 × 165,0 × 300,0 mm

Gross weight: 3,888 kg

Box blank area: 0,4888 m²

Box cost: 5,87 \$

On pallet: 84 (14 × 6)

Pallet utilization: 85,4 %

Packaging / unit: 0,59 \$

Packaging / m³: 1473,01 \$

ORIGINAL OPTION

Pack: 76,0 × 38,0 × 101,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 35

Gross weight: 3,859 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 0,61 \$

Packaging / m³: 2092,63 \$

Saving: 29,6 %

COMPARISON WITH POYAS

POYAS pack: 73,3 × 42,0 × 98,0 mm

POYAS box (inner): 294,0 × 127,0 × 294,0 mm

Packs per POYAS box: 36

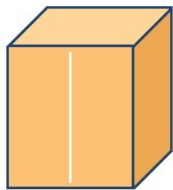
POYAS packaging / m³: 1647,58 \$

packsize packaging / m³: 1473,01 \$

PRODUCT: 3

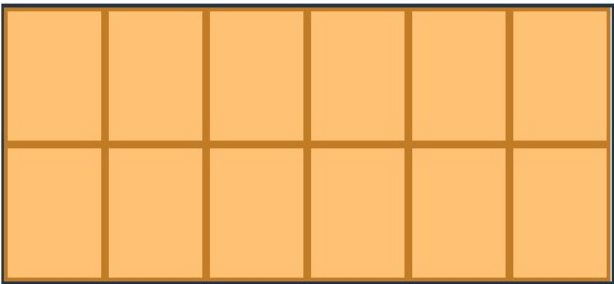
Unification group 3 · Box 355,0 × 165,0 × 300,0 mm

3D pack model



78,0 × 58,0 × 88,4 mm

Pack layout in the box



6 × 2 per layer; layers: 3; total: 36

OPTIMAL OPTION

Pack: 78,0 × 58,0 × 88,4 mm

Layout: 6 × 2 × 3, B-L-H

Packs per box: 36

Product weight per pack: 100,0 g

Pack blank area: 0,0426 m²

Pack volume: 0,4000 dm³

Pack cost: 0,43 \$

Volume change: 19,6 %

Box: 355,0 × 165,0 × 300,0 mm

Gross weight: 3,888 kg

Box blank area: 0,4888 m²

Box cost: 5,87 \$

On pallet: 84 (14 × 6)

Pallet utilization: 85,4 %

Packaging / unit: 0,59 \$

Packaging / m³: 1473,01 \$

ORIGINAL OPTION

Pack: 76,0 × 40,0 × 110,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 35

Gross weight: 3,866 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 0,64 \$

Packaging / m³: 1919,12 \$

Saving: 23,2 %

COMPARISON WITH POYAS

POYAS pack: 70,3 × 46,5 × 106,0 mm

POYAS box (inner): 212,0 × 94,0 × 212,0 mm

Packs per POYAS box: 12

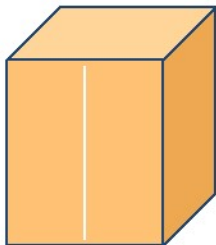
POYAS packaging / m³: 1747,65 \$

packsize packaging / m³: 1473,01 \$

PRODUCT: 6

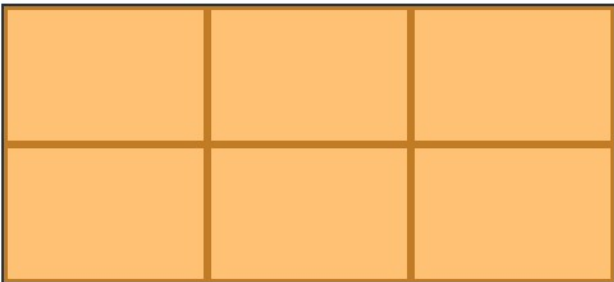
Unification group 3 · Box 355,0 × 165,0 × 300,0 mm

3D pack model



98,0 × 79,0 × 116,0 mm

Pack layout in the box



3 × 2 per layer; layers: 3; total: 18

OPTIMAL OPTION

Pack: 98,0 × 79,0 × 116,0 mm

Layout: 3 × 2 × 3, H-B-L

Packs per box: 18

Product weight per pack: 250,0 g

Pack blank area: 0,0691 m²

Pack volume: 0,8981 dm³

Pack cost: 0,69 \$

Volume change: 19,7 %

Box: 355,0 × 165,0 × 300,0 mm

Gross weight: 4,770 kg

Box blank area: 0,4888 m²

Box cost: 5,87 \$

On pallet: 84 (14 × 6)

Pallet utilization: 85,4 %

Packaging / unit: 1,02 \$

Packaging / m³: 1132,39 \$

ORIGINAL OPTION

Pack: 100,0 × 50,0 × 150,0 mm

Box: 400,0 × 300,0 × 200,0 mm

Packs per box: 24

Gross weight: 6,377 kg

Box blank area: 0,7040 m²

Box cost: 8,45 \$

On pallet: 72 boxes

Packaging / unit: 1,01 \$

Packaging / m³: 1349,30 \$

Saving: 16,1 %

COMPARISON WITH POYAS

POYAS pack: 73,5 × 58,6 × 153,0 mm

POYAS box (inner): 294,0 × 154,0 × 294,0 mm

Packs per POYAS box: 20

POYAS packaging / m³: 1296,94 \$

packsize packaging / m³: 1132,39 \$